

PREFACE

Global Perspectives: summary of analysis

To consider the future of any city is for an urbanist to fulfil his professional purpose. To consider the future of the city that is my own city, the capital city of my nation, is to add honour to duty and not a little pride. To do so at this time of crisis, challenge and uncertainty, when the stakes are so high, adds even greater importance to my task. The output from my review will have significance for Cardiff and also adds to the British and indeed international discourse on the very future of 'the urban'.

Professionally, as someone who has over decades studied and worked on many cities in the UK and internationally and has a reputation in urban policy and governance, economic and community development and regeneration and housing I have been impressed by Cardiff's progress as acity: who wouldn't be? Personally, like all South Walians, I have been delighted by it. I take my visiting Australian family to Cardiff with delight. And, like all Welsh people, even those rightly concerned that their own patch of the country should not be ignored, I view its emergence as the capital city of a renewed nation with pride and anticipation of its future development in that role. It is in that spirit that Ihave undertaken this independent review of Cardiff's strategic ambitions and suggested strategies for recovery post-COVID-19 at this critical time. As a vaccine arrives on the UK scene with potential to help restore confidence, this report is I think timely and I believe of practical utility in taking Cardiff forward again at this extraordinary moment of challenge but also of opportunity to deliver on longstanding ambitions but also to re-think the city's future as are silient, inclusive and innovative model post-COVID-19 city, attractive to talent and investment in the international city - with competition ahead for both.

It is meant — based on a review of the evidence on significant international experience and a dispassionate analysis of the assets, drivers and levers Cardiff uniquely possesses—as an affirmation of a confident future for our

capital city, our city of ambition, our Core City – my first and always city. Cardiff entered this global crisis in good shape, as a Council and as a city and can emerge, with the right spirit, strategy, collaborations and innovation, even stronger after the moment of COVID-19.

In so doing it can provide even more public benefits for both its own community and that of the city region. An important additional opportunity is for Cardiff to become, in the wake of, and in a real sense galvanised by COVID-19, an exemplar for a city of its size – because of its human scale - in the international effort to restore faith in and momentum to the future of 'the urban'. Building on its established and continuing strengths, the ambition it has to succeed, the skills and imagination of its people and the leadership it has already shown. Cardiff will not just 'bounce-back' - of that there is no doubt - it will 'bounceforward' as the Council re-starts what it can do but also re-thinks what it needs to. I have been proud to have been asked to contribute to that process. I believe, based on my experience over decades in working to help cities across the globe transform and regenerate, that in responding to this analysis, the Council will not just help Cardiff recover after this year of crisis; it will lead to Cardiff being seen as an exemplary post-COVID-19 model for a city, attractive to new investment and talent.

Whether one is a pessimist or like me a rational optimist, there can be no more significant or urgent task for a city council anywhere at this moment than to seek to shape an even better future for that city, its communities and its businesses on the road from 2020. There is certainly no more important initiative than this for a consultancy like Arup, that seeks to shape a better world, to be asked to support. And my own response, tempered and informed by the required objectivity and over twenty years national and international experience in urban policy and city management, is of course, essentially this: 'City! City! Come on You Bluebirds!'.

Introduction and purpose

This report has been commissioned by Cardiff Council in order to inform its understanding of the potential impact of COVID-19 on Cardiff's trajectory as a city beyond the immediate health challenges confronting the community at this time. It asks:

What kind of city might Cardiff be 20 years on from the first year of COVID-19? And how did we—the Council and its collaborators – get there?

The report will prompt a discussion within the Council and beyond of the possible scenarios and the potential interventions which may be most relevant – and some policy choices. The successful post-COVID-19 city will in my view be 'mission-led' focussed on a few prime outcomes around planning and housing, transport, economic development, the environment and health and well-being in an overall framework of inclusion and resilience.

A COMMENDABLE INITIATIVE – AT AN EXTRAORDINARY TIME TO BE RUNNING A COUNCIL AND MANAGING AN IMPORTANT CITY

Above and beyond party politics and the specific ambit and indeed content of this report, I believe it is commendable that a Council whilst dealing with the challenges of the here and now in unprecedented times also wishes to start considering and planning for not only what comes next but how to shape the future, most effectively in the interest of the city, the region and indeed the nation. It is notable that in addition to their own deliberations and analyses they have asked for an independent review to challenge them further so as to sharpen their own strategies and interventions.

And as I've suggested it will be vital given Cardiff's significance, not just for Cardiffians but for South Wales and the nation. Given Cardiff's status as a Core City in the UK, cities throughout Britain and wider afield will be looking to Cardiff, as one of the first to commission this kind of review. In that spirit, the report asks-

What policies and approaches should Cardiff Council take? And what form of leadership and role will it assume to secure the future success of the city?

FROM THE IMMEDIATE TO THE STRATEGIC: GALVANISED BY CRISIS TO MAKE CARDIFF EVEN BETTER

On the basis of the evidence set out in the report, I suggest ways in which Cardiff Council and its collaborators can build on its immediate response to the COVID-19 crisis so as to achieve more strategic goals and objectives that will enable the city to not just to recover but also to renew – and to be seen to be doing so in the competition between cities for investors and talent which will undoubtedly follow in due course after the pandemic subsides.

To some degree the report is about reviewing and renewing what might make Cardiff even more live able and productive in the context of an analysis of the public health and economic impacts of the pandemic. While celebrating what cities at their best can do - and what has been achieved in Cardiff over the years only because it is a city and a capital city at that – the report also identifies some of their historic virtues that are under threat and indeed some of what may not have been working well before COVID-19 hit. It also suggests how the crisis, by forcing us out of complacency and path dependency can actually be an opportunity to improve outcomes. My aim is to help Cardiff Council and its collaborators to strengthen Cardiff further and to help it deliver its potential to the Cardiff Capital Region and thereby making it and the communities and businesses across it, more resilient in the face of future challenges.

Following on from this analysis, I consider inter alia, issues I believe will become even more important for Cardiff in the wake of this year of COVID-19. These include:

- · Inclusivity and how to enhance it;
- Improving urban management via digital tools and data;
- Urban planning and strategies and what lessons or directions of travel to incorporate arising from COVID-19;
- Innovating, diversifying and strengthening income streams for the Council and partners to support economic renewal and regeneration activities;
- Building council and partner delivery and strategy capacities and innovating governance and institutions of collaboration:
- Focussing on initiatives to promote a healthier community and a more environmentally sustainable Cardiff

And all with the aim of enhancing Cardiff's resilience in the face of future shocks and stresses and refreshing its crucial role as a generator of opportunity and amenity for the Cardiff Capital Region.

CARDIFF: THE CAPITAL CITY OF 'WELL-BEING'

My thinking and research for this report has led me to believe that, galvanised by COVID-19 as the Council is, the report's contents can help take Cardiff further along the path, earlier, to placing 'well-being' at the heart of its policy and action. Out of evil cometh good. Clearly, under the 'Well-being of Future Generations (Wales) Act 2015' all public organisations in Wales have a legal obligation to prioritise sustainable development at the heart of policy and to plan to deliver the key well-being goals around prosperity, resilience, greater equality, health, community cohesion, vibrant culture and language, and global responsibility. This report can be seen as contributing to achieving such goals in Cardiff in a time when making progress towards them, though challenging, never seemed more important. I believe that Cardiff's future will be grounded in such objectives and that the city has an opportunity in realising them to become exemplary in Wales but also for Wales, on the international stage.

A thriving capital city' – capturing Cardiff's progress and ambition to date

This section explores Cardiff's progress before COVID-19. Cardiff University's marketing strapline captures this well: 'Aleading university at the heart of a thriving capital city'. Cardiff has seen a dramatic transformation from post-industrial decline to a services-based, knowledge-rich economy since the early 80s, though that process was not complete or spatially inclusive by 2020 with some communities across the city in need of new policy focus investment. Its status and role as Wales's capital city also grew significantly. Cardiff has:

- An impressively renewed and renewing multipurpose and diversifying city centre with Wales's only CBD
- A unique capacity to host major sporting events at the heart of the city
- At least two emerging innovation districts, one in creative industries and media, the other in life sciences
- Competitive clusters in digital, fintech and business services.
- Aresurrected and still regenerating Bay, nowhome to key cultural infrastructure and the Welsh Government itself
- A high performing university sector with significant research excellence and some of the most improved schools in the country
- Agrowing base of high value knowledge jobs to serve the city region
- A significant pipeline of major development projects including integrated public transport – further expanding the city's geography of economic opportunity
- A continually improving, attractive and walkable/ cyclable public realmin and around the inner core with further initiatives planned across the city.
- Agrowing status as Wales's national capital with a cosmopolitan community

Cardiffhas one of the few financial, fintech and legal services hubs outside of the south-east with a cultural production and creative industries cluster of UK significance. It gets rave reviews from those attending world class sporting events at one of the few stadiums in the world in the heart of its city. Cardiff has become a city with increasing pulling-power economically—and one with rising status as a university city and a capital city for a renewed nation—creating an irreplaceable focus for inward investment, talent attraction and innovative sectors for the city region on the eve of COVID-19.

THE CARDIFF PREMIUM AND CHALLENGE

These all contribute to the Cardiff Premium but also the Cardiff challenge, as comparisons with Manchester show. Cardiff's population makes up just under a quarter of the total for the Cardiff Capital Region. But it generates 34% of its GDP. However, Manchester with only 19% of its region's population generates 32% of its region's GDP. This suggests a potential 'stretch target' challenge for Cardiff to seek to emulate Manchester's relative productivity. Realising the potential of the Metro Central project including Central Square is one of many keys to this objective post-COVID-19 and is the kind of project only a sufficiently agglomerated city like Cardiff could deliver for Wales.

We are also seeing the emergence in Cardiff, of what in other countries would be called 'Innovation Districts' or precincts, with at least two in creative industries and media and another in health, being of significant potential on the UK stage or even broader. And as we have seen, Cardiff is becoming known globally as the research centre of a compound semi-conductors cluster of significance. Cardiff is also emerging as a place for digital and fintech talent, with a mixture of homegrown indigenous business and leading 'challenger' banks based in the city.

It is well established in economic literature that not only do all cities provide more opportunities for knowledgeintensive business services than lower density settlement forms, but also that cities that specialise in, or that have a comparative advantage in, knowledge-intensive business services (KIBS) with higher than average productivity. Jobs in such services tend to require higher-skilled workers and benefit more from agglomeration effects that arise from the proximity of people. As knowledge spill-overs and productivity externalities decline over distance, knowledge-intensive industries tend to cluster close to each other to benefit from agglomeration economies.

Once firms in an industry start clustering in a location, its growth can be self-propelling. It is plain from recent OECD data that Cardiff has been one of the more successful of the Core Cities in the UK in shifting its economy from declining, lower productivity sectors associated with extraction, manufacturing and port activities, to knowledge intensive business services with higher gross value add per worker.

Cardiff has also performed well in terms of company formation with a growing capacity to create companies with 5 or more workers, an important threshold in this context.

It should be added that such data tends to suggest a process of indigenous company formation has been under way, though some of it would be catalysed by foreign direct investment (of which Cardiff has been a key focus in Wales). This indicates a further benefit from Cardiff's urban economy which is that any such foreign direct investments will have spill-over and multiplier effects on company and job creation which are not achievable outside Cardiff's denser urban form and related innovation eco-system. Investment simply returns more bang for the buck, private or public, in such contexts.

CARDIFF HAS BEEN CREATING GOOD JOBS ATTRACTIVE TO THE CITY REGION

So Cardiff has been creating sectors and jobs not found elsewhere in Wales, with higher productivity (and salaries) and higher capacity to enable new spin-off company formation and indeed spill-over employment opportunities in non-innovation sectors. Knowledge, and particularly innovation jobs enabled by agglomeration, tend to lead to higher wages than for example the manufacturing investment of a previous era, and not just directly but also indirectly in that workers who support and service workers in innovation sectors earn more too. They also create more resulting spin-off jobs than traditional manufacturing investment did.

Cardiff's economy is thus increasingly innovation based, and indeed has been becoming so relatively faster than some other Core Cities, and certainly outpacing areas in South Wales outside its functional urban area. This is suggested by data on a key innovation-metric, that of patent registration over the last few years. This also shows Cardiff to have recently outperformed even London, pro-rata, in patent-registration.

Cardiff has been making a vital contribution to the South Wales economy but as an integrated political, cultural and business centre it is has an even more unique selling proposition—which no other urban centre in Wales, and only a handful in the UK, can approximate. This helps it attract and harness UK level initiatives and programmes crucial in the post-Brexit era and in the context of a UK 'levelling-up' agenda—in the interest of the nation overall, and particularly of the city region: its creation, with the emerging Metro as its building block and symbol of more to come, is of course another sign of Cardiff's role and progress.

In recognition of this progress and role, the draft Wales National Development Framework — which arrived for consultation on the eve of COVID-19 — sees a successful city region, catalysed in great part by Cardiff's growth model, as crucial to further national progress. The report supports this shared objective.

CARDIFF'S TRIPLE CROWN: A UNIQUE SELLING PROPOSITION – AND A FURTHER SYMBOL OF ITS PROGRESS

Capital City-ness is, it is often forgotten, a distinct form of city-ness and such cities have unique assets and potential. Although all capital cities are of course a nation's political centre, they are not always also at one and the same time a country's business and cultural centre. London is. However, while Washington is the political capital of the US, New York is its financial centre and LA its cultural. Edinburgh is a political and cultural capital but Glasgow remains the capital of Scotland's economic heartland.

By contrast, Cardiff wears the triple crown: it has become in the last 20 years, Wales' political and cultural capital, with an increasing importance as we have seen as a business centre, in professional services and knowledge sectors, that sets it apart. This is its unique selling proposition – which no other urban centre in Wales, and only a handful in the UK, can approximate – and like all successful enterprises it needs to play to, and intensify its unique strengths, exploiting its critical mass and interaction of key sectors, on the journey to 2040.

COVID-19 of course impacts seriously how the city functions in the short term, and will influence its future course as an economic and cultural engine. But COVID-19, though it may impact on discussions about globalisation and even interact with post-Brexit thinking

at the British level, will not diminish Cardiff's unique status as a capital city. We may see even greater awareness of it as one of the key foci of collective identity emerging from this challenging time. Cities have been in the forefront of the battle against COVID-19, and in so doing have managed to create an even stronger sense of civic pride and sought to unite often disparate populations behind a unified city identity. This identity is even stronger and even more important for a people when it is the capital city of their nation.

Whatever happens on that front, politically it is likely that as devolution and self-government mature further and the constitution of the UK itself evolves further, Cardiff by 2040 will have even more significance as a capital city – within Wales, within the UK and indeed on the international stage, in Europe and beyond. Its status as one of the four capital cities of the transforming UK can only, it seems to me, be enhanced further over time, lifting it not just in relation to other urban centres in Wales but also in relation to the UK's other Core Cities.

WALES'S CORE CITY

I stress immediately that part of Cardiff's progress and improved brand recognition in the last few decades is that it has been recognised as a key member of the UK's Core Cities. This is an important organisation and advocate and lobbyist for such cities but also a crucial link to the UK context in a still evolving and devolving Wales.

As one of the UK's Core Cities, Cardiff already makes its contribution to Britain's output with the potential – with the right policy settings – to deliver even more. At UK level, lifting the performance of those Core Cities and their associated city regions has been rising up the political and policy agenda. Obviously for a decade there has been policy innovation by central government involving such cities and city regions, in which Cardiff has participated and indeed played a formative role in the Welsh context. Further, after the last UK election a government was elected on a platform of 'levelling-up, potentially involving investment in, policy innovation towards and decentralisation to cities and towns outside the more prosperous South East.

CARDIFF'S IRREPLACEABLE ROLE FOR WALES

Cardiff simply must be enabled, through its creative use of its own capacities but also through renewed partnership with its key collaborators — in perhaps the most important coordinated national effort since a Welsh government was formed in Cardiff—to continue to play its irreplaceable role. Todo this it must have access to the powers, resources and governance required to deliver the transport infrastructure, the city-shaping economic and skills development projects, the urban realm and place—making initiatives and resilience strategies needed to deliver both the city's own ambitions and their potential for the wider region.

Istress: my'rational optimism' about Cardiff's challenges from COVID-19 and potential to emerge positively from it, yetabsolutely requires no complacency about the city's progress to date or problems ahead. While the report provides support for the Council's Capital Ambition policy agenda, Cardiff will yet need ruthless clarity about which of the city's plans or assets will not survive this crisis and openness to the imaginative new strategies capacities and collaborations required to meet the challenges ahead for the city, its businesses and its diverse communities. Anything but a 'business as usual' approach is required following this crisis - not least because despite the progress reported here there was much more to achieve, before COVID-19 hit, and crucially, many more communities to reach to ensure the benefits of inclusive growth and enhanced live ability were shared across the city.

The aim of the report is to help the Council ensure that after this crisis—and galvanised by it—post-COVID-19 Cardiff can indeed be a more inclusive, healthy, economically successful and resilient city for all with equity, liveability and sustainability—perhaps combined in a uniquely Welsh version of the emerging global Zero Carbon/Zero Poverty agenda built around the Paris Accord and the UN Sustainable Development Goals—as guiding principles no matter where one lives.

Cities on the eve of COVID-19

In this section I review the emerging international discussion and evidence about the impact of COVID-19 on cities and their future. Cities were 'the future once': are they still in the era of COVID-19 and its aftermath? Were they all – big, or small – in good shape on the eve of COVID-19? Are all cities equally and similarly impacted by it? Or is size everything? Crucially, if Cardiff as a city is still central to the future of Wales does that mean that it's 'business as usual' for Cardiff or must its direction of travel, even its model of city development, change? If so, what sort of changes or missions, should Cardiff now focus on?

WE HAVE MANAGED SUCH URBAN HEALTH CRISES BEFORE

History does suggest we will as a society get on top of this threat however pessimistic the mood has been. The Spanish Flu of 1918/19, was, it must not be forgotten, followed by the Roaring 20s, when growth returned to cities and conspicuous consumption in them exploded. As urbanist Ed Glaeser points out, cities and pandemics have a long history: cities and towns have always had to 'strike a balancing act between providing the densities that support the collaboration, knowledge and innovation needed to accelerate economic growth, whilst also addressing the public health risks that density creates'.

The report considers such history and also reviews those cities, that even without a vaccine, have seen public transport usage return to 80% of that before COVID-19, hospitality venues, helped by high standards of community hygiene and self-discipline, functioning close to normal and sports stadiums near capacity – all with similar or better health outcomes to those in the UK but with better economic consequences. The point in saying this is not to berate the UK performance: it's to point to real world examples of city resilience and continuity as an inspiration for us to reclaim our own cities as soon as we can, safely. It's to remind us of the long history of

humanity's engagement with pandemics which tends after all to arc towards a 'new normal' that is indeed 'normal' in the sense suggested by an expert vaccine researcher at Johns Hopkins in the US: 'I think this virus is with us to the future. But so is influenza with us, and for the most part, flu doesn't shut down our societies. We manage it'.

Whatever happens from this point there must be no question that Cardiff can, with its public, private and third sectors aligned, 'manage it', and do so with imagination and verve. In so doing Cardiff can not only carry on its journey as Wales's Core City but also attract new attention, investment and talent along the way.

HOW CITIES DELIVERED: KEYINSIGHTS AND TRENDS AS COVID-19HIT

As we know cities exist because of and for agglomeration and the benefits thereof. They exist because they are essentially more efficient, productive and amenity-creating than any other less concentrated form of human aggregation or that are achievable by virtual technologies, despite recent advances.

There was a period after the spread of car ownership and the de-industrialisation of the economy when inner city areas lost residential populations and jobs. But then we saw a recovery of inner-urban productive activity and in the numbers of people working in and living close to, inner urban areas — a process that has been termed the 'reurbanisation of the economy'. Cardiff experienced this too.

CITIES: PRODUCTIVE, LIVEABLE AND FACE TO FACE PLACES OF HIGH VALUE

With the growth of the internet and global communications, many foresaw the death of cities. In reality, as the economy became more specialised, knowledge based and focused on intangibles, faceto-face proximity actually become more, not less significant. Knowledge-producing firms and institutions still wanted to be close to each other and have access to a skilled and creative workforce and that whole place-based ecosystem which is enabled by city environments. On the eve of COVID-19 there was a growing understanding of the importance of the quality of 'place' and of place-management in value creation and in attracting mobile talent and investors seeking environments that were productive and liveable.

TOWARDSTHELIVEABLECITY: EVENMORE URGENT THAN BEFORE

This is why Cardiff Council rightly put liveability at the centre of its vision for the city. This report stresses that suchliveability reinforced by a COVID-19-driven concern for public health and well-being, has become an even more important objective for Cardiff. It is central to what the successful model of city will need to be to retain and grow its own communities but also to attract new investment and talent in the decades ahead. Indeed, Cardiff can be an exemplar of this; and can, I argue, outperform the more challenged bigger cities on this key criterion.

THE EVE OF COVID-19: NEGATIVE EXTERNALITIES PROBLEM IN 'SUPERSTAR CITIES'

On the eve of COVID-19, certain bigger 'Superstar' or 'Mega' cities, were beginning to experience pressures from, and the negative externalities of, pell-mell growth. Their very productivity and thus attraction in the international market, was beginning to make them victims of their own success threatening their near-monopoly as attractors of talent, ideas and wealth. In particular, high-asset price inflation was inducing some families with children to move to areas offering more affordable housing and equivalent or enhanced liveability. Essentially the global cities and those on the cusp of that category were becoming as COVID-19 struck what some have termed 'luxury cities': increasingly gentrified and unequal.

This was prompting increased interest in the attractions of competitive 'secondary' cities, with signs of a potential shift in the geography of talent attraction and investment which smaller but still competitive cities with the right assets, liveable environments and strategies were primed to exploit.

THE MOMENT OF COVID-19: A CHALLENGE TO THE ALL CITIES IN THE 'URBAN CENTURY'?

COVID-19 clearly added a profound shock to already challenged cities and raised questions about that recently dominant urban model, the more compact, higher density and indeed higher-rise city as a physical embodiment of agglomeration economics. Some sceptics of cities have gone so far as to say that the secret ingredient with which cities have turned base metal into gold – density – was itself a crucible for the pandemic and thus should be abandoned as an organising principle. As has been said by one such commentator, 'Dense cities are petri dishes that spread the coronavirus'. But we should be cautious in blaming urban density. The adverse perception of urban density, however exaggerated, is powerful, is shaping markets – and has implications for Cardiff, not all negative.

NEWS OF THE DEATH OF CITIES HAS BEEN GREATLY EXAGGERATED?

Rushing to the defence of cities, urbanist Richard Florida says that 'news of the city's death has been greatly exaggerated'. Conceding that 'some aspects of our cities and metropolitan areas will be reshaped, depending on how long the current pandemic lasts' and that 'fear of density, and of subways and trains in particular, plus a desire for safer, more private surroundings may pull some toward the suburbs and rural areas', Florida yet posits that 'other forces will push people back toward the great urban centres', especially 'ambitious young people 'who will 'continue to flock to cities in search of personal and professional opportunities'. He adds that some of them will be artists and musicians drawn back by lower rents, thanks to the economic fallout from the virus allowing cities to 'reset and to reenergize their creative scenes'. Other commentators have echoed this view that such cities will see a churn of inner city populations and a 'youthification' of CBDs and precincts close to them.

SAFETY IN THE SUBURBS? THE NEED FOR CONFIDENCE IN THE URBAN

However, there is no doubt that, notwithstanding such views, perception of the pandemic as "warping cities' great strength, density, into an enemy" is actively being used to attack urbanism overall. Michael Kimmelman the distinguished New York Times architectural critic, has already warned that 'opponents of density will seize on COVID-19 to undermine support for projects that depend on density', and will seek to promote a revival of suburbia and low density development away from cities. Indeed, that gadfly of everything urban Joel Kotkin is now giddily predicting that Americans at least will 'surely retreat to the cheap land, solo driving, and sense of safety in the suburbs'. There are similar voices in the UK and indeed in Wales.

In my view whether or not the 'COVID-19 crisis for cities' is really as radical or as permanent as this for all cities, even the superstar cities, is unclear and debatable. We have also seen few 'big city' fight-backs as yet attempting to rebalance discussion, stressing the essential role of such cities in national wealth, though one such attempt is under way in Sydney under the motto of 'the city is safe'. Critically, there is also as of yet a lumping together of the situation now, before a vaccine or effective public health interventions, and afterwards, once these are available.

REPUTATIONAL CHALLENGE FOR LARGER CITIES

However, while in reality some of the highest-density cities in the world, Singapore, Taipei and Hong Kong, have shown how density and the effective management of COVID-19 can co-exist, there is no doubt that in a world of CBDs without crowds, socially distanced offices and mass transit without mass then questions are being posed about the desirability and live ability of large cities in particular. There is some modest emerging evidence of flight from such cities of those with choice of where they can live and work. Clearly the shift we have seen towards digital and home working by many knowledge workers-discussed in more detail below-can, if it persists, underpin and enable such flight, though it is not clear whether, or to what extent, this particular trend would survive the roll out of the vaccine or treatment for COVID-19, or even a certain fatigue at home working in key cohorts combined with greater confidence in the 'safety of the city'.

However, the caveat 'large cities' is crucial for any balanced discussion of the overall future of cities and the specific future of Cardiff. COVID-19 may I suggest could actually just be accelerating a trend we were increasingly seeing internationally before 2020. That is that the growth of the bigger metropolitan areas, which had been stellar in the first half of the decade, was slowing by its end, with evidence that certain demographics were already opting to leave the inner cores of bigger cities, on costs and liveability grounds, for suburbs, exurban areas and smaller cities.

Although it is clearly too early to judge this does raise the real possibility that a flatter hierarchy of cities might emerge post-COVID-19 with a stronger role and enhanced attraction for medium-sized and smaller cities, where urban benefits can better be balanced with increased demand for space and non-urban amenities.

A balanced outcome or judgement might be that the future may no longer solely lay with the mega cities, but perhaps with those 'big enough cities' which better balance opportunity and amenity and the costs and attractions of density and concentration.

A CRISIS FOR SUPERSTAR CITIES – AND THE 'CARDIFF DIFFERENCE' AS A CITY FIT FOR NEW TIMES?

In this context, whatever actual dangers there may be from the densities in the mega cities on the global stage, I suggest there is a specific danger of cities like Cardiff being wrongly grouped with such cities as posing the same perceived health risk for such groups when its own density of development, both residential and commercial, is much lower than cities some might speculate are 'high risk'.

All cities are being tarnished with one brush. New York is a city. But not all cities are New York. That is to say that while COVID-19 has triggered a debate - and arguably a necessary one – about the vulnerability to contagion of densely populated superstar or mega cities there is little basis for some kind of generalised 'backlash against cities' of all kinds and scales. The debate needs more nuance and an understanding of the extent to which COVID-19 might reinforce the negative externalities of bigger cities but actually accentuate the value of smaller ones such as Cardiff. I suspect that the perceived problem around the superstar cities, while currently dragging all kinds of cities down, is an opportunity for secondary and smaller cities with the right assets. So whether or not the 'future of the urban' should be a fair question for all cities, this report takes seriously-and I think Cardiff should act positively in relation to - the proposition that post-COVID-19 we shall see not just the potential for flight from cities but actually of flight to ones deemed better fitted to the new times ahead.

The report stresses that Cardiff can be such a city and it is to this proposition we now turn and do so without delusion. For there are also serious challenges ahead.

However Cardiffhad not become so agglomerated as to experience the diseconomies of growth experienced in over-agglomerated cities which were exacerbated as COVID-19 hit, leading to evidence of certain cohorts seeking to leave such cities. The report thus sees some new opportunities for the small scale, as yet less agglomerated towns and cities, such as Cardiff, in the post-COVID-19 era. So the Cardiff score card on the eve of COVID-19 is this: great progress: more to do. Then came COVID-19 with its challenge to the very idea of a city.

Sell larger Cities, buy Cardiff? An opportunity beyond the crisis

The COVID-19 crisis has triggered significant concerns on the perceived vulnerability of particularly densely populated cities. Although cities have usually, historically, bounced back from pandemics and often been made stronger by them – Ed Glaeser's 'Triumph of the City' – there is no question that there is a reputational crisis from COVID-19 impacting 'Superstar' cities. This report indicates that cities may objectively be more or less liable to attract or promote infection but they subjectively have the capacity to make their city more or less resilient in the face of such threats – and to be seen to have that capacity is likely to make a city more competitive in the struggles ahead for securing investment and talent.

Cardiff, objectively, has a scale and structure which could hardly qualify it as a megacity. As we saw, its 'city-ness' was still a work in progress towards the optimum. Its population matches that of a bigger London borough but there are 31 of those. If there are concerns about high-density tall office towers and COVID-19 – more perceived than real as we have seen – Cardiff has a total of only 17 office and residential buildings over 50 metres high, the official threshold to be considered a tall building – and none over 100 metres with the two tallest being just on 80 metres. Its dominant residential patterns are medium density terraces in the closer-in and older neighbourhoods and lower density suburban homes in leafy precincts just a few kilometres further out.

Though there are aspirations to improve mass transit, in terms of public concerns about modes perceived to be a conduit for infection, it does not have a subway system and is not planning one. It already has a good network of parks and open space in a city that has strong walkability elements in close-in neighbourhoods though needing to provide more to communities across the city. Its climate is mild, as are its winters—helping to suppress the impact of infections—and being located close to the coast moderates levels of atmospheric pollution, which also helps protect those with underlying respiratory conditions.

IT HAS FEWER NEGATIVE EXTERNALITIES AND A UNIQUE MIX OF BUSINESS, AMENITY AND SPORT

Cardiff has thus not developed many of the negative externalities of the superstar cities while yet building well towards the kind of activity, culture, cuisine and all other manner of human interaction we look for in cities.

Add in the unique atmosphere and impact of major international sporting events – something which must be, and can be, with imagination and collaboration, assured and you have a unique city offer developing, with more to come.

And though the data are difficult to compare as between England and Wales Cardiff's COVID-19 morbidity has not made it an outlier so on its journey to its liveable smaller city version of city-ness Cardiff is unlikely to be badged as quite as problematical as some cities with which it can be compared.

YOU CALL THAT DENSE! CARDIFF IS NOT CROYDONISED LET ALONE MANHATTANISED

Whether or not density is a key factor in COVID-19 'spreading', Cardiff is not in any comparative sense dense, either residentially or in terms of tall office towers. The further good news from that is that it thus can in enabling development from this point ensure that building and infrastructure are designed to COVID-19-resilient standards: a real bonus for a safe urban future.

If dense cities were a pandemic risk—as yet unproven—Cardiff is essentially not that kind of city and wasn't on a track to be so. It is not Wuhan, Milan, or even a Hackney or a Camden with Cardiff having just over a quarter of the population density of such London boroughs. Note that Cardiff is actually much lower in residential development terms and also lower in commercial real estate density than Copenhagen the poster child for density done well and good urban planning.

HOW CITIES MANAGE THIS CRISIS WILL BE NOTED BY TALENT AND INVESTORS

Objectively Cardiff thus has assets which help its comparative performance. Subjectively, with the right resilience and city regeneration strategy and indeed effective marketing of its potential after this crisis, the Council and its partners can choose to build on these assets and can strengthen the city further and in so doing establish its brand as a model city resistant to acute public health risks.

How well different cities are perceived to handle the different stages of the pandemic and transition has clearly become subject to new and acute scrutiny. I think the Council and its partners should assume that cities will be judged and rated comparatively by business, investors and talent on the competence and success of their crisis and transition management. This is a competition in which they can be internationally competitive.

Cardiff must differentiate itself

Cardiff must thus differentiate its strategy and its brand from the generic cities' story going forward. This is not just so as to defend its present reputation but also so as to project its offer afresh as it develops its post-COVID-19 model city approach. COVID-19 does suggest there may be changes to the geography of talent attraction and a potential for new investment patterns which 'secondary' cities — such as Cardiff — with the right approach may be able to exploit.

Despite the attacks on 'the urban' overall I suspect the biggest question marks will hang over the mega cities that were already experiencing the negative externalities of growth in the previous cycle. The smaller but 'big enough' cities with the right assets, environments and strategies may actually have great potential for new success in the wake of COVID-19: that is the working hypothesis such cities should pursue. They may in fact be precisely the kind of cities to where those concerned about negative externalities of the mega cities, reinforced by COVID-19 fears, may choose to relocate. They may also be the cities where because of their scale and unity an effective coalition of public, private and not for profit sectors can be assembled to share the transition to a positive post-COVID-19urbanfuture. The restoration of optimism about the future of cities will be led by such cities.

Making the case for the smaller cities: the Cardiff opportunity

It is clear given the simplistic urban debate we have seen, that Cardiff needs to get out from under the generalised attack on cities to lay out its unique city model, its relative resilience already in public health terms, its continuing benefits now as a city and its plans to design an even more confident future for Wales' capital city going forward.

Guardian architecture critic Rowan Moore set the right tone when he stressed that a combination of the 'push' of COVID-19 and the 'pull' of tech-enabled homeworking will impact on the locational choices of those with choice. His overview is this: 'sell mega-city, buy smaller city'.

His conclusion is balanced and I think appropriate: '...the best response might not be a rush away from everything urban, but a less violent redistribution from one kind of city to another'. 'What if' Moore asks, 'there were a shift in intensity away from the biggest cities towards the others?', 'What if?', indeed.

Moore sees a chance of steering the decentralising potential of the pandemic towards towns and cities that already have much or most of 'what it takes to support highly successful communities, but could do with a bit more economic and social energy'- and indeed, a bit more public policy support and innovation. I agree and the report supports the view that if there is some movement away from mega cities the destination for most—and the future surely to be aimed at by policy-makers—will not be the outer suburbs or the 'country' but the 'human scale city'.

That city has the benefits of well-managed density and fewer of its externalities, so it is yes, less expensive, but also safer, cleaner, and indeed greener, enabling that better balance between jobs and home, liveability and productivity, nature and development, social solidarity and individual advancement, and physical and yes mental health and well-being, increasingly sought by communities.

That city is not the density at any cost city, nor is the solution the low-density exurb: it is the post-COVID-19 'density done right city'. When done right, urban density, instead of being a perceived or actual enabler of a biomedical emergency, actually has 'protective benefits'. It adds to the quality of urbanisation and reduces the structural inequalities that are at the heart of health problems. So inhabitants living in 'density done well' urbanism walk more to services, shops and schools and two decades of data show this increased walkable accessibility lowers incidence of heart disease, diabetes and obesity: those 'underlying conditions' which have made some cohorts and precincts more vulnerable to COVID-19, and prey to its most adverse impact, than others.

That is a real city-shaping lesson for Cardiff to learn from, but also to improve on in its path towards, being a city in which public health outcomes are front and centre in its strategies for place and people. Cities which enable or promote walkability and cycling will result in more people who are 'healthy, wealthy and wise' as walkability is positively associated with both higher GDP and academic outcomes as well as improved public health. Much of the health inequality in cities is connected to uneven – 'spatially unjust' – access to walkable and cyclable neighbourhoods or mass transit networks to walk to. The walkable and cyclable city is more pandemic resilient, healthier and more inclusive.



Such a city will bring enhanced health and economic benefits to its citizens but also prove attractive in the new post-COVID-19 city market for talent and investment. Cardiff can and I believe will be that city.

That city is the liveable, inclusive and productive city of short-journeys between jobs, homes and amenity; the city of great virtual and physical connectivity between its centre, its priority precincts, its many, diverse, flagship sites, its sustainable neighbourhoods and its regional heartland. The city, yes which brings public health experts to the urban design and planning table to offer a fresh perspective on neighbourhood design features that promote physical and mental well-being. The city in which the end-game was never density at any cost, but density done well. The city of human scale—the bigenough city—right for the times, resilient in the face of challenge. You could call it Cardiff 2040.

CITIES AT AN INFLECTION POINT: THE COUNCIL SEES NEW WAYS OF WORKING AND THINKING

Cities overall have reached an inflection point, where new ways of working and operating become thinkable if not mandatory, opportunities for piloting new policies emerge, and where the expectations that citizens, business, talent, visitors and governments have about cities are fundamentally in flux. In return civil society turns to cities' leaderships not just national governments for inspiration and guidance in such crises because they know both that our towns and cities will be different as a result of this crisis but also that they will be central to the huge economic recovery effort needed.

DEFENDING THE CITY'S BENEFITS AND RELATIVE ADVANTAGES: LEVERAGING ITS ASSETS IN A NEW ERA

It's important that Cardiff and its partners defend the city's benefits for the city region and Wales because it is a city but yet publicly differentiates its form of city – and the form it will take – from the bigger cities and their perceived negative externalities on which COVID-19 has focused attention and arguably reinforced. It should also point to ways in which the crisis positively accentuates some trends in the relative market attractions of places other than the mega cities and specifically that Cardiff's offer to investment, talent and its own communities is a high quality one now with better to come. Cardiff is already by comparison with most Core Cities and mega cities a cleaner, greener, lower density, smaller, healthier model of city with unique character and an ambition to improve further as required to be resilient and successful in the post-2020 world.

Cardiff's assets and scale alone provide the opportunity: the strategy required to exploit the opportunity needs to be in place with the Council itself having the capacity and resources in place to support delivery but also with all necessary partners and collaborators from the public, private and not for profit sectors aligned behind a shared vision and approach. The issue becomes how it—via its own strategy, capacity and resources and those of partners who want to share the journey—now turns that ambition and potential into a new reality, overcoming problematic barriers and exploiting prime key opportunities.

Managing a changing city centre as three challenges converge – and strengthening local centres across the city

This section reviews evidence and thinking around the future of retail, of work and offices and of events in Cardiff. It makes suggestions about renewing and 'curating' the city centre/CBD in the context of a wider discussion about the overall structure of Cardiff in the future as potentially a 15 minute city.

As COVID-19 hit there were generic concerns in cities everywhere about trends underway before COVID-19 but which have been accelerated in the wake of it. These are the shift to digital/home working and the radical rise in online retail. Add to this the unique Cardiffissue of having a world-best stadium at the heart of the city and the related implication for all this for the hospitality sector in this special place—and you have a potential perfect storm of challenges for a city centre/CBD such as this. This represents a significant challenge of city centre management and 'curation' to the Council. Resources, organisational capacity and focus, collaborations and imagination will be required—and over the longer term—to deal successfully with this challenge.

RETAIL

Retail is the sector which has probably picked up the largest 'negative shock' from COVID-19 added to its pre pandemic challenges: there is a dramatic shift underway and what has been called the 'Amazonisation' of supply chains and logistics in our cities. Cities everywhere will need to manage such shifts and councils will be working as seldom before with landlords who themselves will have to be more creative and proactive about their assets and tenants. The shift from 'bricks to clicks' catalysed by COVID-19 is an existential threat to high streets and city centres—and needs to be responded to as decisively by a coalition of the relevant public and private sector organisations with the Council leading the way. A range of creative approaches are outlined in the report from, re-zoning for mixed uses and internal redesign of buildings to external animation of public space.

This shift will need to be a core focus for any city going forward. There are real opportunities to diversify city centres and actually make them more engaging and appealing to more audiences, and more mixed use – but imagination and capacity will be required to help make a successful transition. The Council will need to lead in 'curating' the CBD/city centre ecosystem, working with the private sector and other tiers of government.

The same will apply to the knock-on impact for cafés, bars and restaurants of changes to their customer base with councils needing to be flexible and creative around transition in uses but also in assisting the sector to grow out onto the streets even more. Cardiff will need to work creatively with the sector to restore momentum or to find alternative ways to ensure on-street vibrancy, by night and by day. Again, a resource and strategic priority Cardiff's work over the years to promote vibrant and shared streets in the city centre showed what can be done—and this will need to be creatively built on. The Barcelona Mayor has a slogan in another context which I think should inspire our collective cleverness around this key problem: 'Fill the streets with life'.

The Council must develop the capacity to curate the city centre in over long term—through the Council developing its own resources but also sharing resources in collaboration with the private sector, cultural institutions and initiatives and the Welsh Government. Consideration may be given to supporting of the city's Business Improvement District to focus on a post-COVID-19 city centre recovery, as well as other fiscal tools.

REMOTE POSSIBILITY: HOME WORKING AND THE FUTURE OF OFFICES

The shift to home-working to suppress the contagion has clearly also had a radical impact. It is not clear how radical over the long term or whether the advent of a vaccine will restore office occupancy in city centres. As a self-styled realist/optimist, I would suggest that too much of the commentary on the future of offices was made at the start of the lockdowns and high phase of home-working before office-leasers, users and employees started getting over the shock of the new, had experienced any down-sides from home-working or began thinking creatively about how to re-invent the attractions of city offices: the mood and response has been shifting as the lockdowns went on and companies and indeed employees began to discover some of the diseconomies of home-working. While the shift to much more home-working has been substantive and much of it will stick, creating some important new long term facts for cities to plan for – and some opportunities for what I have called the 'human scale city' to exploit, too much of the thinking and commentary on this subject has been premature and shallow.

'THE CITY IS SAFE': A POSITIVE COUNTER TREND?

The report seeks to avoid fatalism or to assume the 'new normal' implies the complete end of CBD office-working. It does not. And of course, as of writing, some governments internationally, concerned about the economic crisis confronting their CBDs and thus their nations, have begun to campaign to persuade employees of the importance and benefits of working in offices and indeed to highlight some of the adverse economic and health consequences of working from home. In New South Wales in Australia, the Government is now seeking to persuade public and private sector staffs back to the Sydney CBD under the slogan of: 'The city is safe', with the NSW Treasurer saying that 'we now need to begin returning our city safely to a more normal footing'.

Of course, some companies in the highest value locations are indeed thinking that if no one is coming to the office, why does the worker need to be in London when they could be hired at a cheaper rate elsewhere? As we have suggested: that could be Cardiff's opportunity, but only if Cardiff can separate itself off from the general malaise perceived to be impacting especially the bigger cities, and forge effective and collective strategies to develop and market the post-COVID-19 Cardiff offer.

It is doubtful that many firms will continue to allow all staff to work from home for five days a week, but two days a week may become common, with workers splitting their time between a city centre HQ for certain functions and collaborations and either their home as at present or the kind of local, neighbourhood or small centre co-working spaces we are beginning to see emerge, and will see more of going forward. Simply put 'Home-work is here to stay, but not for everyone or for every workday'. The report stresses this will mean the Council creatively developing – with private sector and university partners – the dynamic ecosystem of Cardiff's city centre/CBD with its transformed retail and office offer - but also strengthening the economic potential of other key sites and mixed use centres across the city-and ensuring an efficient transport network linking the 'hub' and the 'spokes'. The report suggests that some movement in this direction is underway in the wake of COVID-19 and that Cardiff has a structure which could be further developed in this direction with the right strategy and investments in place-making and transport: but with the strong caveat that in any hub and spokes model the 'hub'-Cardiff's city centre-must remain dominant and strong albeit changed.

EVENTS IN THE CAPITAL CITY

The third objective challenge to the city centre and one specific to Cardiff given its unique events and cultural offer, and the importance of it commercially and reputationally, is of enabling a stadium at the heart of the city to function successfully and of managing significant flows of people in a new era of public health concerns. It is pretty vital that there is a specific Cardiff-focussed strategy going forward on this key element of the city's attraction and functioning as a city for big events—a strategy that of course includes other venues which attract significant audiences for say cultural, entertainment or business events.

A targeted and robust strategy is vital and can be successful. The report reviews initiatives by stadiums and venues and embraces inspiration from Australia and New Zealand. The Aussie Rules football grand final in late October 2020 was played in a Queensland stadium with 30,000 fans attending though Western Australian Government had offered to provide the Perth Stadium for the game at its full capacity of 60,000. And if there were doubt that iconic national rugby stadiums in major cities can be restored to near-full health the recent All Blacks v Wallabies game in Sky Stadium (34,500 capacity) should reassure us.

And not just sporting venues: as of mid-October 2020, Spark Arena Auckland, a 12,000 capacity arena for sport and entertainment, opened again to provide a full range of events, including a sell-out on October 17 for NZ recording star Benee and a heavyweight boxing clash. Despite this year of crisis, once community infection is suppressed audiences are keen to return. The report stresses that sport and music will be key parts of a 'healthy city' branding for the post COVID-19 model city going forward. It would also reflect the enhanced – and very timely – focus the Council is adopting on music and on nurturing a reputation for home grown talent, including the continued commitment and progress towards delivering a new Indoor Arena and initiating a unique Cardiff signature event that should make the city a leading UK destination for sport and music.

CURATING THE CITY CENTRE AND THE RENEWED IMPORTANCE OF AN IMAGINATIVE NIGHT-TIME ECONOMY STRATEGY

Whatever the precise configuration is of the activities and businesses in the city centre/CBD following on from this crisis, we must assume the Council and collaborators will have to do more to draw people into and animate the city centre in which they have all already invested heavily. New strategies and resources will be needed. The coordination and 'curation' of the area — of 'place' — by the Council will need a renewed focus, capacity and 'toolkit' of interventions: these are in my view 'must haves' now not just 'nice to haves'.

And of course, places change from morning to night. The mission and toolkit to shape the long-term future of a city centre will include special measures to activate a new night time economy. In pursuing such a strategy Cardiff has the opportunity to be an exemplar on the international stage for a city of this size—and should seize that opportunity.

CODA: A RENEWED CARDIFF CBD

It should be clear that I am confident that with the right strategies and collaborations we will see a renewed Cardiff city centre and CBD whose 'offer' will be reasserted where it can be and reimagined where it needs to be. But it will be part of a strategy for a more inclusive, resilient and balanced city that retains a vibrant core but also sees some distribution of economic activity across the city. The lockdowns have reminded people of the virtues of a local, walkable precinct or centre and there is some appetite everywhere to develop a city's local centres to be more mixed use if possible. The vision of the report is thus of a vibrant and renewed if more diverse city centre more connected by short multi-modal journeys to mixed use centres at a more local level. I see this modified central core with stronger local 'spokes' as likely to emerge as an internationally preferred model but also as something that Cardiff could realise to a high quality. This is a model which is a major theme arising out of COVID-19 and will attract people to cities that can achieve this. It's 'Cardiff as a 15 minute city'. That is, a city that can be traversed North-South or East-West in that time, multimodally, including by means of a strengthened rail network and active transport infrastructure connected to local mixed use 'villages' and centres which themselves are foci for local short journeys.

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Cardiff as a model city post-COVID-19?

While cities will inevitably be different as a result of this crisis it would be foolish to deny that they will remain central to the large economic recovery effort ahead of us. Whenever 'the city' has been challenged before by pandemic or significant shifts in cultural preferences or changes in the needs of an economy, it has always managed to go one step back but two steps forward. It has redesigned itself to survive. It has been resilient – bouncing back stronger after absorbing lessons from existential threats. Anti-fragile.

The best cities are already understanding what in their city can be simply restarted, re-thinking what needs to be rethought, and renewing what needs changing. The public mood shifts to a 'living with/life after' mentality concerned to secure the economic and health future, we are seeing people beginning to reclaim their city. And soon — I am sure—we will see those leaders wishing to ensure they win a changed competition for investment and talent, proclaim their changed city as a vibrant but safe destination resilient to future threats.

So Cardiff should do what it is doing which is to prepare, with its collaborators, communities and businesses for the next urban future. I think it has a highly positive potential as a model post-COVID-19 human scale city. There will be budget challenges ahead clearly and the need to find new resources. But local leaders and their economic development teams have a huge role ahead to shape and support this recovery, and to build better, fairer, more resilient, sustainable and productive economies and cities. Cardiff in this context has challenges but also opportunities, many of them not available to mega cities under pressure at this time.

REASSERTING THE FUNDAMENTALS OF THE 'GOOD CITY'...

At one level COVID-19 reinforces some of the fundamentals of the 'good city', one that's healthy to live in. It reminds us of the importance of unglamorous things like clean air, public space, parks, green areas in your neighbourhood and how they both attract people to come to, and induce people to stay in a city. Innovations there must be however. COVID-19 is breeding some desire for new thinking that achieves a better quality of life while preserving productivity, social inclusion and the environment.

...WHILE CREATING NEW THINKING ON INTEGRATED STRATEGIES AND GOVERNANCE, INVOLVING BOTH PEOPLE AND 'PLACES'

As the shock of the crisis gives way to planning the future, we shall see post-crisis thinking turning to new thinking on integrated strategies to radically strengthen the resilience of our cities and how they can become more inclusive, accessible, greener, more circular and smarter. Part of this new thinking will be about enhanced Council involvement in helping to secure the health, well-being, skills and employment opportunities of the people they are accountable to. Part of it will be about an even bigger role in what might be called the 'stewardship' and 'curation' of place'. The report stresses this role in recovery.

BETTER PLACED AFTER COVID-19: INTENSIFYING THE COUNCIL'S ROLE AS A 'CURATOR OF PLACE'

Underpinning this report is the notion of 'place' and the centrality of place-shaping, and place-making to success in the post- COVID-19, resilient city. This also means recognising the role of local government not just in planning places — essential though that role is — but in what might be called the 'curation of place'. In addition to delivering quality and equitable services to the community and statutory planning, being the 'curator' of the city and its key areas, precincts, neighbourhoods and centres, is or should be a core council function post. The sine quanon of this process is an empowered and strategically enabled local authority as leader for its places and communities and as 'convenors' bringing partners together to collaborate.

This council role is literally irreplaceable. No-one else – apart from the community itself – cares as much about the quality of 'place' or has the legitimacy to lead the 'place-making' and curation process in its jurisdiction apart from the elected council. This as a central organising principle for Cardiff's recovery strategy.

COVID-19 has actually made us think about 'place' more not less. We all now realise how important it is to have safe and welcoming public and open spaces to have access to and places of agglomeration and interchange as foci of economic development and innovation.

The report calls for prioritised 'curation of place' and the convergence of disciplines and partners required to achieve the best results. Cardiff should undertake a comprehensive audit, outside the usual planning cycle, of the key performance indicators around economic activity and health and well-being of 'places' which are core to its strategy. Partly to see what has not changed during COVID-19 in terms of the function or character of a place but crucially what has changed or may need to change as a prelude to effective interventions to re-shape and curate that place. Successful cities are in a deep sense an accumulation of great places with place-curation being critical to building the shared value, community capacity, and cross-sector collaboration that is the bedrock of resilient cities and communities.

GALVANISING MOMENTUM AROUND THE GREEN AGENDA

The 2020 crisis has enabled us to think about long term trends and what the future could hold for our cities and regions, especially in relation to the climate agenda and the economy. There is momentum, galvanised by COVID-19, towards realising locally the Paris Agreement and the UN Sustainable Development Goals (SDGs). This agenda has been summarised as 'zero carbon-zero poverty'. A cluster of innovative technologies is likely to be encouraged by this agenda: renewable energy, electromobility, smart cities, hydrogen-based industry, circular economy technologies, and biophilic urbanism. The report identifies some of the potential of this agenda for Cardiff to think through and to indeed lead, working with partners across the city region. New housing and regeneration initiatives while delivering their own important outcomes can also reinforce this effort. The Council has already been a pioneer in such initiatives and we suggest building on the innovations we have seen at the Council. Housing is a key part of a broader regeneration and place-making effort involving the retrofitting of existing settlements and the creation of new ones along a more mixed use, walkable and sustainable model-the 'city of villages' or 'nearbyhoods'. If one adds the key issue of increasing access to potential ownership to this and the need to reinvest in existing public and social housing to ensure energy efficiency and health benefits for tenants from greening initiatives ten you have a major post-COVID-19 agenda.

GOVERNANCE INNOVATION TO OPTIMISE CARDIFF'S CAPACITY, POWERS AND RESOURCES – IN THE INTERESTS OF WALES

Crucially the crisis is also driving cities, councils and government to reflect on the underlying governance and financing requirements to enable recovery and transformation. I believe there are particular imperatives for reform to optimise Cardiff's governance and resources framework, so as to equip the city with the ability to prepare, invest and respond to future crises. The international debate is heading towards accelerated devolution of powers, responsibilities and finance to local or metropolitan levels and innovative partnership working between tiers of government. This means innovative governance collaboration between the Council and the Welsh Government to deliver the Cardiff Premium. The report identifies governance initiatives to deliver this innovation between tiers of government – and where needed, other partners – in 'place-management' or regeneration initiatives.

The following overall will be required;

- **New growth models** that prioritise innovation, inclusion and sustainability
- New governance structures that are multi-sectoral, multi-government –tier, entrepreneurial, and potentially involving local business and communities in new ways
- New financial mechanisms that unlock public wealth and organise private and civic capital around a public purpose
- •New organisational, strategic and delivery capacity to design and realise the full potential of these innovations

So, we will we need to see new initiatives around for example greater alignment between the public sector and private developers around land-based financing, urban regeneration and transit oriented development; and agreements with universities, colleges and schools to promote a shared and inclusive innovation, skills and economic development agenda. Collaborative city governance post-COVID-19 is a core mainstream activity aimed for material benefits for local communities and businesses, for economic-focussed place-making and for restoring momentum to that engine of growth that is the city.

A CITY'S ABILITY TO IMPLEMENT ITS OWN STRATEGY AND INNOVATION IS KEY

Whether a city could orchestrate the vision, strategy, financing and implementation to turn aspirations into reality was becoming a definite area of differentiation for investors on the eve of COVID-19 and will be more important going forward. So too will be a city's ability to innovate to increase the rate of investment and capture value across whole lifecycles. These factors are increasingly central to decisions made by investors and mobile talent as to where to locate.



CARDIFF'S 'NETWORKED GOVERNANCE'

In advocating that a successful re-emergence of Cardiff in the wake of COVID-19 requires that the Council evolve further its model of open and collaborative leadership, I stress that this model of governance is as much about the Council being the city's prime advocate, and organising and convening allies in other tiers of government, business and the community behind shared strategies, as it is about being a producer of public services. Simply put the governance innovation should have two axes: a horizontal and a vertical one: vertical in the sense of collaborating with tiers of government such the Welsh and UK governments; horizontal, in terms yes of working with councils in the city region but also and crucially, deeper engagement with local business, universities and indeed the community.

Collaboration: with councils

This will remain significant, particularly in the dty region context, but not limited to this more or less 'northsouth axis', as Cardiff will rightly seek to build on the increasing integration of the 'coastal' authorities to its west and east and ultimately Bristol. Greater strategic alignment between Bristol and Cardiff as part of the emerging Western Gateway initiative will be crucial, and reflects the capacity Cardiff has to be Wales' representative in this initiative, which is of UK significance and which may lead to levels of policy focus and public investment equivalent to those of the Northern Powerhouse region. Cardiff taking this role may itself draw innew UK level government infrastructure resources and private investment unavailable to any other Welsh city.

Collaboration with the private sector

This should involve innovative partnerships around city economic development strategies and marketing

and, where appropriate, new forms of partnership to deliver economic and innovation opportunities and area regeneration.

Collaboration: with universities

This will also be critical to private sector partnerships and growth of the local knowledge economy. Post-COVID-19, universities will be forging ever closer links with the areas and cities in which they are located. Getting more of the local community in the city region into courses – not just degree courses - run by the city's universities, will become core business. At the same time, as the start-up innovation economy strengthens, so will the physical and other bonds between other parts of the private and public sector, operating in the district around a university. As we have seen, Cardiff has emerging innovations districts and will have more. It is vital for effective public, private and community partnerships to support these initiatives, to maximise public benefits from them, to enable more spill-over effects into the wider economy and to enthuse and engage local young people to develop the skills and aptitudes to enable them to exploit this new momentum.

Collaboration with the community

Ithink building on the strong bonds we have seen develop between the community and their governments in jointly managing COVID-19 is what the best practice city will be doing. I think Cardiff should be inspired by this too in galvanising the engagement and indeed capacity to coproduce of local communities, both through greater use of digital platforms and via more mature neighbourhoodlevel forums or council-led partnerships across the city but perhaps particularly important in what might be termed 'priority precincts' where major regeneration projects are planned or where local mixed use centres will be enhanced. I believe that Cardiff has a real opportunity arising from this crisis of being best in class in the extent and depth to which it provides opportunities for its communities businesses and universities to have a creative role in the shaping and delivery of core strategies and services for the city.

VERTICAL GOVERNANCE: RENEWED COLLABORATION WITH WELSH GOVERNMENT-AND ACCESSING NEW UK GOVERNMENT OPPORTUNITIES

There is a pressing need for the Welsh Government to support its capital city through this transition and to work even more closely with the council on shared approaches to innovation and investment. Cardiff is the 'urban goose' that Wales has that can lay the kind of golden egg countries anticipate and need from their cities. Like someone famous once said: there is no alternative.

I urge the Welsh Government to also consider governance and institutional innovations so as to maximise returns from shared approaches. If appropriate they could use the relationship with and opportunities in Cardiff, as prototypes to be rolled out elsewhere in Wales afterwards. Whatever the doubts or concerns, and indeed pride, we all have as Welsh people in our own parts of the national fabric, it gets torn as under if our capital city falters. This is a moment for high national unity, focus and open-minded innovation.

CARDIFF: CAPITAL CITY AND FIRST AMONG EQUALS?

So its vital going forward that the Welsh Government, because of the importance of the city and its challenges and opportunities, see the Council as 'first among equals' in terms of governance partners. The strategies for maintaining and renewing the moment of Cardiff's CBD and knowledge economy and for leveraging Cardiff's big city projects - capital projects at Central Station, the Bay, St Mellons, the emerging innovations districts, the new Valleys Metro and network in Cardiff, estate renewal projects of scale – require a mature and imaginative partnership and institutional alignment between Cardiff and the Welsh Government, with each putting skin in the game, for mutual and indeed national benefit. Internationally, the best results are coming when governments embrace collaboration with, and the devolution of powers and even assets to, their key cities.

CITY COUNCILS NEED EMPOWERMENT AND PARTNERSHIP WITH GOVERNMENTS: NOW MORE THAN EVER.

I have to stress that all evidence on city performance shows that its governments flourish and deliver most for their region when they are empowered and work in partnership with other tiers of government, particularly in their city region: but their functional sovereignty and unique understanding of the assets of their own city and how they work best for the common good needs to be reflected in their governance and powers. This is both commonsense and common practice. It would seem wise to ensure that any changes proposed in the management of planning, economic development and indeed transport in and for Cardiff, reinforce the Council's capacity and strategies to both serve the city's citizens and to maximise the city's potential for the wider region and indeed Wales.

In the competition for investment and talent, the successful city as I have stressed will be those perceived to have the necessary power to make, coordinate and fund decisions regarding key issues and assets, such as the future of transport in the city or resources for area regeneration or estate renewal. They will be seen as strategically clear and authoritative in deciding and distilling the essence of the city's aspirations for itself, and in guiding the city to that goal. But it needs to be understood by all, that cities will of course also be assessed by the quality of partnership they have with other relevant key actors and particularly the government tiers above them. Governance alignment and shared strategic focus is always attractive in the market. It will add to Cardiff's offer in the post-COVID-19 era to have a best in class, creative collaboration with the Welsh Government in particular but also with UK central government: crucial given that the successor funding to European Structural Funding in the process of being designed by the UK Government is likely to focus on second tier cities with Cardiff a potential focus for this important new investment source: and thus a possible conduit for extra UK public sector spending in the dty region.

GOVERNMENT AND CITY COUNCIL WORKING TOGETHER TO EMPOWER THE CITY

Wales needs Cardiff to have that authority, quality and capacity—an empowered council in a creative partnership with the Welsh Government and it agencies, aligned behind a shared development strategy to maximise returns from the city's key opportunities and sites, prototyping new delivery arrangements and tools as required. That model is a win-win model for cities and their states wherever it is implemented.

In this context the Welsh Government will want to ensure that its 2019 proposal to establish Corporate Joint Committees (CJCs) will indeed strengthen this vital partnership between the upper and lower tiers of government in realising the full potential of our capital city and reinforce the focus, the strategy and the resources required to maximise Cardiff's economic contribution to and wider role for the region and indeed Wales. The report stresses the benefits for the Welsh Government of the EU's Leipzig Charter' Integrated Urban Development Model, which essentially institutionalises subsidiarity.

It also directs attention to the need for 'hard' and 'soft' investments in people and place to be integrated—so that for example the skills, housing and health opportunities for communities from development are optimised as in the best urban regeneration programs. Todo that always requires collaboration between local city government with its integrated understanding of, and accountability for people and place outcomes and the relevant government agencies.

Although I favour this kind of integration being formally instituted constitutionally or by legislation in the longer term, pragmatism is required now. Tomorrow, discussions could start on imaginative agreements between tiers of government, requiring flexibility and the sharing of objectives and the application of targeted powers and resources by partners, each putting skin in the game. The report suggests initiatives including one targeted form of such 'city contract': the Place Infrastructure Compact.

PLACE SPECIFIC GOVERNANCE ARRANGEMENTS FOR CONCERTED REGENERATION: PROTOTYPING A PLACE-BASED INFRASTRUCTURE COMPACT IN CARDIFF

Place Infrastructure Compacts (PIC) are an innovation which have emerged out of the Greater Sydney Commission, Sydney's first metropolitan integrated planning authority. I suggest they be should be explored, evolved and prototypes by the Welsh Government and Cardiff in relation to a more integrated approach at the more local 'place' or key site/precinct level within Cardiff to help coordinate public sector planning and investment for maximum public benefit. The PIC or PIC style governance arrangement could I think be applied in keyrenewal areas for Cardiff but potentially also applicable to any city centre/CBD renewal plan (where a proposal to have a joint Cardiff-Wales Government Renewal Taskforce may also be worth exploring). The governance model provides the tools of alignment and coordination and the potential for real partnership among government agencies and tiers of government.

At its core the PIC aims to deliver the right infrastructure, at the right place and at the right time by directly linking the realisation of place-based outcomes to the delivery of infrastructure. PICs reflect and deliver strategic objectives in the urban plan aimed at city-shaping, community and economic outcomes and encourage alignment of strategic planning and delivery.

The place-based infrastructure compact is thus focused on place outcomes not investment silos. The key is the mandate for genuine collaboration across government and between tiers of government and key local actors to break away from siloed business cases towards delivery of regional place-based outcomes. It relies on people working together and sharing information: collaboration and subsidiarity. It is something I believe can be pioneered in a post-COVID-19 Cardiff in a joint effort to deliver the vital pipeline of key sites, precincts and projects in the Cardiff portfolio. To get the best out of that portfolio means both strengthening the Council's own capacity, resources and powers while the Welsh Government should design be poke forms of collaboration to jointly exploit key opportunities: perhaps using Cardiff to prototype such collaborations as part of an effective co-design process which can then be extended beyond the Cardiff-Welsh Government relationship.

CARDIFF AS WALES'S TEST-BED FOR POST-BREXIT WESTMINSTER INITIATIVES

Cardiff will wish to explore some of the flagship post-Brexit and soon to be post-COVID-19 initiatives emanating from the UK Government. As we have noted the British Government has stressed a commitment to governance innovation and devolution of powers of economic significance as part of its core 'levelling-up' agenda. That agenda is aimed at enabling cities and towns to become more productive generators of economic value for the UK through local institutional innovation and value-creation. Although much of the agenda is targeted at the English North and Midlands there will be opportunities for Cardiff which may be able to leverage the tools and investments on offer to the advantage of the city, city region and indeed Wales.

The toolkit we see emerging, to some degree influenced by dty region initiative such as Greater Manchester's, includes an earn-back approach to infrastructure investment where local governments may borrow from a new UK-wide infrastructure bank (backed by Treasury) on the basis of anticipated and hypothecated income streams from growth in a variation of what in the US would be called Tax Incremental Finance. It also includes the potential localisation of transport planning and governance to enable regional versions of Transport for London to emerge. Of special interest to Cardiff as a port city - perhaps in collaboration with that other port city Newport given the fast-growing economic corridor between them and the shared interest in the development area around St Mellons and along the coast – is a new emphasis on enabling Free Ports which could work in tandem with adjacent Enterprise Zones. Cardiff has great potential as a site for such innovation.

While I have advocated in this report the Council itself embraces changes, some modest, some more ambitious, I have also advocated that the Welsh Government explore collaborative governance innovations on the lines of the Leipzig Charter and the PIC. Although it is outside the purvey of this report, my own view is that the Welsh Government should perhaps now be more radical in pursuing governance innovation and the strengthening of local government reviewing its position on local government amalgamations overall but particularly as a way of creating metropolitan scale governance with Cardiff at its centre. Given the disruption to council income streams and strained resources - and the need for the Welsh Government to have stronger, more strategically enabled partners going forward, to help shape the post-COVID-19world, I don't think there's a better moment. And Cardiff would be a very willing 'first among equals' partner for the Government. For another report and probably another day.