Atkins comments

Atkins overall comment area 3: London Plan - Digital Smart Response:

Commenting on digital and smart infrastructure planning.

Atkins believe London will need to plan in an increasingly smart way going forward. This will need to be supported by both digital infrastructure that can provide rich data feeds but also through the development of a platform for open data and city modelling, that can be used across the realm of city planning to address London's development challenges in a more rapid and timely manner.

Our recognition of the challenge the Plan is attempting to address

London faces many challenges going forward from climate change to poor air quality etc. Our understanding of the causes and impacts of these challenges can be improved by wider use of 'big data', often with data sets that are 'live' this can allow quicker and more targeted action to address the issues. The use of such big data is becoming more prevalent across all areas of our lives. The challenge for City planners is how can we harness this data in a way that opens up city planning to all Londoners, and makes best use of that data to plan development and infrastructure provision, in a way that makes are our City more liveable, more sustainable and more equal, and so that the City better meets the needs of all Londoners.

Our understanding of the Plan's approach here

The London Plan makes reference to smart infrastructure in various places including the following:

Para 1.5.2 identifies that use of smart technologies can help to meet its 2050 zero carbon target.

In Policy SD2 – Collaboration with the wider south east (WSE), the plan sets out that the Mayor will work with the WSE partners to find solutions to shared strategic concerns including smart solutions (see also para 9.6.7).

Para 6.8.3 sets out the Mayor's aspiration to be a global test bed for 'smart city' solutions, and the opportunity to support low carbon services through the development of a smart and sustainable district at Old Oak.

Para 9.1.3 also sets out that opportunity areas should aim to be air quality positive by reducing air pollution, and it references the use of data from smart infrastructure that could contribute to beneficial design solutions.

Para 9.2.3 sets out that all Boroughs should maximise opportunities for on-site electricity and heat production from solar technologies and use innovate building materials and smart technologies. An approach which will reduce carbon emissions, reduce energy costs to occupants and improve London's energy resilience.

Para 9.2.10 Boroughs are encouraged to request energy strategies for development proposals. These should include proposals for demand side response, specifically installation of smart meters, minimising peak energy demand, as well as consideration of smart grids and local micro grids where feasible.

Policy S12 - Water infrastructure. Development proposals should be encouraged to incorporate measures such as smart metering.

Policy S16 – Digital connectivity infrastructure. Requires developments to: achieve greater digital connectivity than set out in part R1 of the building regulations; ensure sufficient ducting for future digital connectivity infrastructure; enable mobile connectivity; and support effective use of public realm to accommodate well designed and located mobile digital infrastructure.

Para 9.6.7 refers to digital connectivity supporting smart technologies in terms of collection, analysis and sharing of data on the performance of the built and natural environment. It states that development should be fitted with smart infrastructure, such as sensors to enable better collection and monitoring of such data.

Areas we recommend for further exploration or consideration - and why

We believe that the mayor should be the driving force behind developing a City Information Model that can be used to plan the future growth and development of the city. The London Pplan can set the framework for this, by placing a requirement on Boroughs to model and plan their future growth 'digitally'. London Boroughs should develop their local plans (and supporting evidence) so that the data that drives policy development can be incorporated within an open data environment. This would have benefits for cross boundary / strategic working, and by making use of more 'live' data boroughs can make quicker and more informed decision about how to revise their plan, and make planning decisions based on the latest available data. Linking planning decision areas to data parameters that can be monitored, within the City Information Model, could be effective here.

Developers of large scale developments should be required to model their development proposals in the City Information Model, to enable decision makers to assess the potential impacts of development using data that is openly available within the City Information Model. The aim would be to develop proposals that will be more resource efficient and drive sustainable ways of living.

We believe there are also benefits and efficiencies to be had from making use of more smart and digital tools for infrastructure planning (e.g. better programming, cost savings and greater sustainability and resilience). The Borough's and developers should be encouraged through policy in the London Plan to explore the use of such tools.

The Plan does seem not take account of the rapid shifts in transport to an intelligent mobility system, where by transport is moving to a system that uses connected autonomous vehicles (CAVs). These are vehicles that are connected digitally to each other and the wider environment, and will not be controlled by the driver. Planners in London must understand the impact of CAVs on existing intelligent transport systems (ITS) deployments, as well as the investment needed around communications technologies. This understanding should be, linked to strong policy development and strategic direction.

The London Plan needs to set the framework for how future infrastructure – from traffic signals and lamp posts to roads and bridges – is prepared to accommodate CAVs. Can current infrastructure support the wireless connectivity required by connected vehicle technologies – particularly traffic signals. This is particularly important pertinent as infrastructure is replaced or renewed through maintenance and improvement. Rather than replacing like-for-like, the Mayor and others responsible for infrastructure provision should consider how infrastructure can be upgraded in preparation for CAV adoption.

More widely, the Mayor should consider the implications of CAVs on new transport schemes. For example, the congestion benefits realised by CAVs may negate the need for new road building in certain areas, or the need for new parking provision in new developments.

Atkins overall comment area 1: London Plan – A Joined-up Approach

Commenting on the holistic nature of the London Plan.

Our recognition of the challenge the Plan is attempting to address

As stated in Paragraph 0.0.7 the London Plan is trying to bring *"together the geographical and locational aspects of the Mayor's other strategies".* It is trying to create *'A City for all Londoners", as per the Mayor's 2016 'A City for all Londoners' document.* This is a great challenge, with competing pressures of a fast-growing population, rising inequality, a changing economy and the effects of climate change.

Our understanding of the Plan's approach here

As the Strategic Plan for a Global City, the Plan needs to have an integrated approach to delivery and implementation. The Key Diagram (Figure 2.1) presents the spatial vision, focusing on London's growth corridors, Opportunity Areas, Town Centres, Green Belt and Metropolitan Open Land. Whilst the Plan establishes a clear spatial strategy for key areas of growth, we at Atkins believe there is a need for a more integrated, holistic approach *at all scales* to enable the Plan to more effectively meet the challenges of a Global City.

Discussion on whether this or other approaches would be most effective, and the rationale/ evidence for this

The Plan is effective in setting out a joined-up approach to the key growth areas. However, it lacks a similar approach to the plethora of other spatial designations supported by policies across the Plan. These include cultural, housing, economic and regeneration designations of size and significance varying from international to neighbourhood. There is therefore a lack of clarity concerning the key designations that influence planning decisions and plan making in the London Boroughs.

If the Plan is to facilitate delivery of sustainable, inclusive growth by the London Boroughs, it needs to consider these designations in a more holistic, joined-up manner. The approach to this could include, but is not limited to:

- Establishing the relationship between designations across policy concerns (e.g. economic and cultural designations) or across scales (e.g. Strategic Areas for Regeneration and Local Areas for Regeneration);
- Establishing areas where designations can produce mutually reinforcing benefits; and
- Establishing commonalities in the infrastructure requirements to deliver different designations.

Atkins' Future Proofing London report (2015) provides a strong framework for this type of thinking to tackle the challenges that London faces. It proposes Curated Clusters - '*urban places of distinctive character and high quality of life, containing a flexible and adaptable mix of residential, commercial, retail and services'.* The approach delivers sustainable, integrated growth through its emphasis on co-location of services in a creative way, on adaptability and the use of existing heritage and culture, thus '*maximising the appeal to a variety of industry sectors as they emerge and evolve'.* Governance and delivery '*will vary from place to place, but will often include a similar set of stakeholders including the local authority, key land owners, public service providers and most importantly the community and businesses within the area.'* Having a clear, holistic strategy is a crucial guide to the development of sustainable and connected communities, and this relies on coordination between a range of stakeholders.

Therefore, we believe that the London Plan's Key Diagram should be accompanied by a more granular diagram that shows how London Boroughs should plan holistically to nurture sustainable communities. We feel that there is a need to ensure that policy direction is not narrow in focus (e.g. Retail on Ealing Broadway) but is connected to culture, housing and economy in a more joined up manner. Illustrative examples of how a more joined up approach between these currently disconnected designations could be adopted are as follows:

1. Linkages between different scales, such as Strategic Industrial Locations and Locally Significant and Non-Designated Industrial Sites - should Boroughs aim to promote trickle-down effects or supply chain linkages, where smaller scale sites can be planned to act in a supporting role to Strategic locations?
2. Linkages between different policy designations. For example, the importance of the Cultural Quarter may be evident concerning larger scale Town Centres or Opportunity and Regeneration areas, but culture is just as important in a local community as in large scale tourism. There needs to be a policy effect on a more diverse and localised level. When considering schemes for housing or even employment – respectively falling under Estate Regeneration or Strategic Outer London development Centre designations, for example - the cultural aspect needs to be promoted more by linkages between policy designations to deliver a more sustainable future for London.
3. Supporting infrastructure requirements. For example, can the Growth Corridors supporting strategic infrastructure be integrated to improve connectivity to Strategic Outer London Development Centres or Economic Clusters?

We have considered and looked to present the London Plan's spatial vision through such linkages. This task enabled a diagrammatic of the spatial vision to be developed, showing how designations may relate to each other and to different scales and spaces of the City and its Boroughs. We would be happy to demonstrate this further.

Areas we recommend for further exploration or consideration

We recommend that the conclusions of the Integrated Impact Assessment and the drive in this response for a more holistic policy approach are enacted in the London Plan at all scales. This should ensure that places are shaped by all aspects of planning, as connected to the imperatives for housing and economic growth, to ensure that Londoners achieve the highest possible quality of life.

Page:	Draft New London Plan
Section:	N/A

Atkins overall comment area 4 - Economy and Employment Space

Our recognition of the challenge the Plan is attempting to address

To conserve and enhance London's global economic competitiveness, by maintaining and growing a diverse and inclusive economy that enables all Londoners to benefit from the city's economic success. Key challenges include ensuring a sufficient supply of employment land and premises in different parts of London, including affordable space suitable for new start-up companies and SMEs

Our understanding of the Plan's approach

The Plan sets out to ensure that London maintains a sufficient, diverse and affordable supply of employment space. Permitted development rights and strong housing pressures have led to the loss of record levels of employment land in recent years. The Plan's approach is to support boroughs to consult upon and introduce Article 4 Directions to protect office, industrial and logistics capacity where appropriate (**Policy E1** and **Policy E4**). It supports the principle of no overall net loss of industrial floorspace capacity across London in designated Strategic Industrial Locations (SIL) and Locally Significant Industrial Sites (LSIS).

Recognising the finite amount of land available in London and the multiple uses competing for it, the Plan supports the intensification and higher density of employment uses (**Policy E7**). This will be achieved by encouraging innovative design and more efficient use of land through higher plot ratios. The Plan also states there may be scope for some substitution of London's industrial capacity to locations in the wider region where this will result in mutual advantage. However, this will require close collaboration between planning authorities inside and outside London.

In terms of affordable workspaces, the Plan states that in defined circumstances, planning obligations may be used to secure affordable workspace at rents maintained below the market rate (**Policy E3**). These defined circumstances include workspaces for specific sectors that have social or cultural value, for disadvantaged groups starting up in any sector, and for supporting start-up businesses or regeneration.

Discussion on whether this or other approaches would be most effective and the rationale/ evidence for this.

We welcome the Plan's support for the introduction of Article 4 Directions to protect office, industrial and logistics capacity where appropriate, and for supporting the principle of no overall net loss of industrial floorspace capacity in designated SIL and LSIS (**Policy E1** and **Policy E4**). We believe this is a sound approach that will enable boroughs to better plan and implement their employment land policies based on their appreciation of local supply and demand characteristics.

We believe the continued rapid loss of employment land represents a significant threat to the long-term economic prosperity of London. Allowing boroughs to have a greater say in the protection or release of their employment sites is a positive development that will strengthen the plan-led system.

At the same time, we appreciate that the main reason for introducing permitted development rights in the first place was to help address the significant housing undersupply, especially in London. It is therefore critical that boroughs only protect employment sites that are genuinely fit for purpose and serve the needs of local businesses. We would suggest considering the introduction of a mechanism that links a borough's track record of delivering new homes with its ability to safeguard its employment sites. This would provide a strong motivation for boroughs that are keen to protect employment sites to do both.

We also welcome the Plan's support for the intensification and higher density of employment uses (**Policy E7**). Good design and innovation will be critical factors for achieving this. Several big cities around the world are facing similar challenges to London's and we believe that international co-operation, knowledge transfer, and the sharing of best-practice lessons would result in more innovative, effective and deliverable solutions. This outward-looking approach aligns well with the Mayor's #LondonIsOpen campaign and we believe the Plan should place a greater emphasis on this.

We support the Plan's support for affordable workspaces (**Policy E3**), but we would welcome more clarity on how this would be delivered and enforced in the context of mixed-use developments. The largely unsuccessful live/work units experiment of previous decades has demonstrated that ongoing monitoring and enforcement are crucial to avoid employment space being converted to residential. Modern construction methods such as modular construction could potentially enable affordable workspaces to be delivered faster and cheaper, strengthening the viability of such schemes. Modular construction could make viable the development of small sites that would not otherwise be viable. We believe there is an opportunity for the Plan to explicitly promote the use of such construction methods to help deliver much needed affordable workspaces.

Page:	Draft New London Plan
Section:	N/A

Atkins overall comment area 5: Inclusive Growth

Our recognition of the challenge the Plan is attempting to address

Atkins have been attuned to the growing and UK wide attention to inclusive growth, and the importance of inclusive design.

Atkins acknowledge and support the London Plan's commitment to inclusion in multiple realms – in particular in spatial use and development, housing, and social and economic outcomes. The 'Good Growth' concept that underpins the London Plan has been defined as that which is socially and economically inclusive. This is encouraging.

Our understanding of the Plan's approach here

Housing is a key element of inclusion in the Plan, whilst the 2017 Inclusive Growth Monitor (Joseph Rowntree Foundation) includes housing affordability (ownership) and housing costs (rental) as 2 of the 18 indicators for an area's inclusive growth. The London Plan places housing as a central component of inclusion for the capital such as with Policy GG4, and Policy SD1 – '*Ensure that Opportunity Areas maximise the delivery of affordable housing and create mixed and inclusive communities.*'

Town centre policies have also built in the notion of inclusion - as strong, resilient, accessible, inclusive and viable hubs for a diverse range of uses, where town centres are understood as the main focus for Londoners' sense of place and local identity.

Atkins strongly support policy E11 'Skills and opportunities for all' - for the Mayor to work with strategic partners to address low pay and co-ordinate national, regional and local initiatives to promote inclusive access to training, skills and employment opportunities for all Londoners.

We also support the attention paid to inclusivity in the Plan's approach to developing the night time economy. Paragraph 7.6.11 '*Boroughs should also work with land owners, investors and businesses to address perceived barriers to accessing the night-time economy and enhance the experience of London at night...*'

Atkins believe the recommendation, for Boroughs to work with the private sector to inclusive ends, could be encouraged/ incentivised further and across different realms of inclusion. Boroughs could have a framework for monitoring and reporting on various inclusion measures, and have best practice guidelines on how to address these (including private sector collaboration). We believe the Mayor could set out such a framework and lead the way for greater transparency in how inclusion and inclusive growth is being met across the capital, and to identify the challenges that remain. This could help foster shared learning and collaboration to meet the challenges of inclusion and inclusive growth.

Discussion on whether this or other approaches would be the most effective here, and the rationale/ evidence for this

The London Plan's first Good Growth Policy GG1 is: *Building Strong and Inclusive Communities*. This policy recognises important challenges and focusses here, including unequal distribution of wealth, an aging population and enhancing accessibility for communities and interactions between them. Atkins also suggest further challenges to be recognised here including around enterprises, to ensure that businesses of different localities, size and sector (such as start-up SMEs) have access to affordable workspace. Further, inclusive growth can be supported with the capacity building of the local enterprise base. This can include the use of public sector procurement to enhance local impact, opportunity, and economic sustainability.

Overall, we feel that the London Plan can be 1) more prescriptive, or provide more guidance and framework, for how the Boroughs can identify, address and monitor their own inclusivity challenges; and 2) to recognise the importance of inclusion throughout the project lifecycle and development process.

In providing guidance to Boroughs for delivering inclusion and inclusive growth, we refer to the approach of policy SD9, which states that '*each town centre should have a Town Centre Strategy produced in partnership at the local level in a way that is inclusive and representative of the local community*.' And that '*Regular town centre health checks should be undertaken to inform strategic and local policy and implementation*.'

We feel that this type of guidance could be applied to other areas of the London Plan, to encourage the Boroughs in addressing their inclusion challenges and in collaborating with stakeholders, a crucial means to delivering inclusive outcomes.

Further, the monitoring of progress on inclusion measures is an important step in both a) feeding back to the planning stage and setting new objectives and priorities; and, b) in refining the operation of infrastructure.

We recognise that inclusion is important throughout the development lifecycle; from needs assessment and priority planning, through stakeholder engagement, design, financing, delivery and operation. This includes the inclusive access to the social and economic benefits of development, and the avoidance of an unequal distribution of any negative impacts.

Atkins agrees with point 1.1.5 that Early engagement with local people leads to better planning proposals, with Neighbourhood Plans being a key tool here. Atkins suggest that the London Plan could set out some principles for boroughs to follow in undertaking local engagement through project development processes to ensure this engagement itself is inclusive, representative and responsive and that this process helps to deliver inclusive outcomes.

These principles may capture some of the following:

- How to ensure participation for different age group engagement, income and socio-economic group engagement, ethnic group engagement, people with disabilities, and others who may typically be under represented or underheard in this engagement process.
- How this engagement can be framed at different phases of the development process i.e. for initial planning and outlines, for design, for impact assessment, construction and delivery and in operation.
- How to work to overcome the barriers that some people face in accessing economic opportunities

Areas we recommend for further exploration or consideration

To set guidelines and an outline framework for London Boroughs to identify their inclusion and inclusive growth challenges. This would help support Boroughs to set objectives, assess impacts and monitor progress. There should be an encouragement for feedback to be made from inclusion objectives and progress monitoring to local planning.

Page:	Policy GG1 Building strong and inclusive communities
Section:	GG1

Please see Atkins overall London Plan comment area 5 - Inclusive Growth

Particular points -

Overall, we feel that the London Plan can be 1) more prescriptive, or provide more guidance, for how the Boroughs can identify, address and monitor their own inclusivity challenges; and 2) to recognise the importance of inclusion throughout the project lifecycle and development process.

Please see Atkins overall London Plan Comment 2 - Outer London Revitalisation

Policy GG2 – making best use of land. Seeks high density and mixed-use places, but under criteria a) there is no clear priority in the sources of land that are identified, so the criteria simply serves as a catch all as there are very few if any examples of land that don't fall under these categories. There could be a concern that it leads to high densities in locations that aren't appropriate (e.g. public sector or other land not well served by public transport). Criteria b) places a requirement on 'those involved in planning and development' to proactively explore the potential to intensify the use of land, including public land, to support homes and workspaces, particularly sites that are well connected by public transport, walking and cycling. The guidance in this policy is not clear, is the policy aimed at both local planning authorities and developers, it is not clear how those involved in planning and development are expected to show they have been proactive. The policy needs to clearly define what is meant by well-connected, so there is a clear link between connectivity and density of development and land use. The intent of the policy is good but how it will be implemented in practice needs more consideration.

Policy GG2 is not location specific (i.e. it's London wide), but in order to be more supportive of outer London's revitalisation there needs to be an acknowledgement that Outer London needs investment in public transport, walking and cycling to support intensification and more efficient use of land. Otherwise the implication is that efficient use of land (which is likely to mean development at higher densities) is only going to take place in areas that are well connected or have planned investments in place. Much of outer London is unfortunately poorly connected by rail and the tube network, which means without further investment outer London won't be able to make as big a contribution to accommodating London's growth as the London Plan envisages.

Page:	Policy GG5 Growing a good economy
Section:	N/A

GG5 Growing a good economy sets out the policy priorities for the economy. Policy GG5 does not directly reference outer London revitalisation, so it is not clear what approach the Mayor is seeking for outer London's economy. We believe the Plan (policy GG5) should address the unique role that outer London can play to help diversify London's economy and maintaining its global competitiveness. In particular London's small growth sector businesses can find it hard to compete for central London prime employment space, and business that help to support London's Central Activities Zone are being pushed out as commercial space is converted to residential. Outer London can help provide space for these economic activities. To do this London Plan policy needs to ensure that outer London can be adapted to the changing economic landscape London will see over the lifetime of the London Plan. This will mean ensuring a stock of employment land is retained in outer London to accommodate the businesses that support the functioning of the CAZ. There is also a need to think more creatively about how existing office locations in outer London meet the changing needs of businesses in the future as businesses in the growing creative industries sectors seek more flexible and adaptable space that is mixed with other uses and allows co-working.

The spatial development pattern that is promoted in the London Plan is key to delivering homes and jobs. There remains a focus on the Central Activities Zone (CAZ), but the plan identifies the potential of outer London, where the suburban pattern of development is appropriate for intensification over time (chapter 2, para 2.0.3 and Policy SD1). The London Plan is not clear on what would be an appropriate level of intensification in outer London and doesn't define appropriate intensification.

Page:	Policy GG5 Growing a good economy
Section:	GG5

Please see Atkins overall London Plan Comment 2 - Outer London Revitalisation.

Particular points -

Policy GG5 does not directly reference outer London revitalisation, so it is not clear what approach the Mayor is seeking for outer London's economy. We believe the Plan (policy GG5) should address the unique role that outer London can play to help diversify London's economy and maintaining its global competitiveness. In particular London's small growth sector businesses can find it hard to compete for central London prime employment space, and business that help to support London's Central Activities Zone are being pushed out as commercial space is converted to residential. Outer London can help provide space for these economic activities. To do this London Plan policy needs to ensure that outer London can be adapted to the changing economic landscape London will see over the lifetime of the London Plan. This will mean ensuring a stock of employment land is retained in outer London to accommodate the businesses that support the functioning of the CAZ. There is also a need to think more creatively about how existing office locations in outer London meet the changing needs of businesses in the future as businesses in the growing creative industries sectors seek more flexible and adaptable space that is mixed with other uses and allows co-working.

| Page: | Introduction to Chapter 2 |
| Section: | Figure 2.1 |

Please see Atkins overall London Plan Comment 1 - Joined-up Approach

We believe that the London Plan's Key Diagram should be accompanied by a more granular diagram that shows how London Boroughs should plan holistically to nurture sustainable communities. We feel that there is a need to ensure that policy direction is not narrow in focus (e.g. Retail on Ealing Broadway) but is connected to culture, housing and economy in a more joined up manner.

This would involve considering and demonstrating the linkages between Plan designations, and at different spaces and scales of the City and its Boroughs.

We provide illustrative examples in our full comment #1.

Policy SD1 – Opportunity Areas are those parts of London that will see significant change. The policy identifies clusters of opportunity areas within key growth corridors. Some of the opportunity areas are in outer London, and the plan makes it clear that growth within growth corridors will require major investment in transport and other infrastructure. The Plan has a clear focus on radial corridors that will link outer London opportunity areas with the CAZ, this is without doubt important: to help reinforce agglomeration benefits the CAZ offers; to improve connectivity (access to jobs) and improving capacity on transport networks. However, there is no consideration of the importance of investing in orbital connections (public transport of all types, as well as improved walking and cycling infrastructure) and how local transport improvements connecting suburban areas to outer London's opportunity areas and town centres will be key to helping all Londoner's access opportunities. We believe the London Plan needs to clearly support orbital connectivity in Policy SD1 and other parts of the Plan.

The plan acknowledges the connections of London with the wider area, policy SD2 and SD3 set out the importance of collaboration with authorities in the Wider South East (WSE) and the growth locations in the WSE. Figure 2.15 and paragraph 2.3.6 set out the infrastructure priorities that enable the WSE to connect to growth areas in London. The London Plan should also set out how outer London growth areas interact with the WSE as the plan does not currently refer to this at present.

The London Plan is very clear that it aims to accommodate all of London's growth needs within its boundaries (para 2.3.1) without intruding on its green belt or protected open spaces. Meeting London's needs within London places pressure on outer London Borough's in particular to accommodate growth, having a major impact in terms of intensification and through accommodating growth on small sites. We would question how realistic it is that outer London can achieve this significant growth through a heavy reliance on small sites alone, and would also suggest that if small sites can be brought forward in significant numbers, the London Plan needs to be clear on what sort of place outer London will become. Small site housing growth could have a significant cumulative effect on transport and other infrastructure, so this growth needs to be supported by appropriate infrastructure provision.

Page: Policy SD1 Opportunity Areas

Section: SD1

Please see Atkins overall London Plan Comment 2 - Outer London Revitalisation

Particular points -

The policy identifies clusters of opportunity areas within key growth corridors. Some of the opportunity areas are in outer London, and the plan makes it clear that growth within growth corridors will require major investment in transport and other infrastructure. The Plan has a clear focus on radial corridors that will link outer London opportunity areas with the CAZ, this is without doubt important: to help reinforce agglomeration benefits the CAZ offers; to improve connectivity (access to jobs) and improving capacity on transport networks. However, there is no consideration of the importance of investing in orbital connections (public transport of all types, as well as improved walking and cycling infrastructure) and how local transport improvements connecting suburban areas to outer London's opportunity areas and town centres will be key to helping all Londoner's access opportunities. We believe the London Plan needs to clearly support orbital connectivity in Policy SD1 and other parts of the Plan.

Page: Policy SD2 Collaboration in the Wider South East

Section: N/A

Discussion on whether this and/or other approaches would be the most effective here, and the rationale for this

Policy SD2 references the use of smart solutions to provide solutions to shared strategic concerns, however this is not elaborated on and therefore it is not clear what is meant by smart solutions in this particular case. Further clarity on what solutions are envisaged and how they will be implemented is required.

We support the aspiration to use smart solutions to help make the city more sustainable and liveable, but we believe the aspirations in the plan need to be more enforceable and place a requirement on developers. Most of the references to 'smart' infrastructure in the plan are aspirational and appear in the supporting paragraphs to policies (e.g. paras 6.8.3, 9.1.3, 9.2.3, 9.2.10), they generally do not provide a policy requirement. By including a policy requirement for such technology this would provide a stronger incentive for both the Boroughs to include policies on smart city solutions in their local plans, and for developers to include smart technology in their development proposals.

Page:	Policy SD2 Collaboration in the Wider South East
Section:	SD2

Please see Atkins overall London Plan comment 3: Digital Smart Response.

On particular points:

Policy SD2 references the use of smart solutions to provide solutions to shared strategic concerns, however this is not elaborated on and therefore it is not clear what is meant by smart solutions in this particular case. Further clarity on what solutions are envisaged and how they will be implemented is required.

We believe that the mayor should be the driving force behind developing a City Information Model that can be used to plan the future growth and development of the city. The London Pplan can set the framework for this, by placing a requirement on Boroughs to model and plan their future growth 'digitally'. London Boroughs should develop their local plans (and supporting evidence) so that the data that drives policy development can be incorporated within an open data environment. This would have benefits for cross boundary / strategic working, and by making use of more 'live' data boroughs can make quicker and more informed decision about how to revise their plan, and make planning decisions based on the latest available data. Linking planning decision areas to data parameters that can be monitored, within the City Information Model, could be effective here.

Page:	Policy SD3 Growth locations in the Wider South East and beyond
Section:	2.3.1

Please see Atkins overall London Plan Comment 2 - Outer London Revitalisation

Particular points -

The London Plan is very clear that it aims to accommodate all of London's growth needs within its boundaries (para 2.3.1) without intruding on its green belt or protected open spaces. Meeting London's needs within London places pressure on outer London Borough's in particular to accommodate growth, having a major impact in terms of intensification and through accommodating growth on small sites. We would question how realistic it is that outer London can achieve this significant growth through a heavy reliance on small sites alone, and would also suggest that if small sites can be brought forward in significant numbers, the London Plan needs to be clear on what sort of place outer London will become. Small site housing growth could have a significant cumulative effect on transport and other infrastructure, so this growth needs to be supported by appropriate infrastructure provision.

Page:	Policy SD3 Growth locations in the Wider South East and beyond
Section:	2.3.6

Please see Atkins overall London Plan Comment 2 - Outer London Revitalisation

Particular points -

The plan acknowledges the connections of London with the wider area, policy SD2 and SD3 set out the importance of collaboration with authorities in the Wider South East (WSE) and the growth locations in the WSE. Figure 2.15 and paragraph 2.3.6 set out the infrastructure priorities that enable the WSE to connect to growth areas in London. The London Plan should also set out how outer London growth areas interact with the WSE as the plan does not currently refer to this at present.

Page:	Policy SD6 Town centres
Section:	N/A

The Plan supports a town centre first approach (Policy SD6), with town centres acting as viable hubs for a range of uses (retail, leisure, culture, residential and business space), mixed use housing led intensification, and strengthening local character. Potentially this policy has significant implications for growth and redevelopment in outer London, the policy doesn't make any specific references to outer London.

Page:	Policy SD7 Town centre network
Section:	N/A

However, we do believe that the London plan's overall approach to retail established through SD7 Town Centre network needs to acknowledge the unique challenges that outer London town centres are facing, so that these town centres continue to remain the hub of their communities. As retail space needs change (in part due to greater levels of online shopping), there is a danger that town centres contract and become less viable as they become more residential focused, but as retail needs potentially reduce, there is an opportunity to increase leisure and cultural uses, to maintain viability and redress the imbalance of cultural resources in outer London compared to inner London.

Page:	Policy SD7 Town centre network
Section:	SD7

Please see Atkins overall London Plan Comment 2 - Outer London Revitalisation

Particular points -

We believe that the London plan's overall approach to retail established through SD7 Town Centre network needs to acknowledge the unique challenges that outer London town centres are facing, so that these town centres continue to remain the hub of their communities. As retail space needs change (in part due to greater levels of online shopping), there is a danger that town centres contract and become less viable as they become more residential focused, but as retail needs potentially reduce, there is an opportunity to increase leisure and cultural uses, to maintain viability and redress the imbalance of cultural resources in outer London compared to inner London.

Page:	Policy SD9 Town centres: Local partnerships and implementation
Section:	N/A

Policy SD9 calls for strong, resilient and adaptable town centres, with town centre specific strategies. As acknowledged in the supporting text (para 2.9.1) the unique character of each town centre and the significant changes and restructuring that retail is facing, makes it crucial that a strategy is developed for each town centre. We support the development of town centre strategies that will enable a bespoke approach to the future development and growth of town centres.

Page:	Policy E3 Affordable workspace
Section:	E3

Please see Atkins overall comment 4 - Economy and Employment Space

Particular point -

We support the Plan's support for affordable workspaces (**Policy E3**), but we would welcome more clarity on how this would be delivered and enforced in the context of mixed-use developments. The largely unsuccessful live/work units experiment of previous decades has demonstrated that ongoing monitoring and enforcement are crucial to avoid employment space being converted to residential. Modern construction methods such as modular construction could potentially enable affordable workspaces to be delivered faster and cheaper, strengthening the viability of such schemes. Modular construction could make viable the development of small sites that would not otherwise be viable. We believe there is an opportunity for the Plan to explicitly promote the use of such construction methods to help deliver much needed affordable workspaces.

Page:	Policy E4 Land for industry, logistics and services to support London's economic function
Section:	E4

Please see Atkins overall London Plan Comment 4 - Economy and Employment Space

Particular point -

We would suggest considering the introduction of a mechanism that links a borough's track record of delivering new homes with its ability to safeguard its employment sites. This would provide a strong motivation for boroughs that are keen to protect employment sites to do both.

Page:	Policy SI2 Minimising greenhouse gas emissions
Section:	9.2.10

Please see Atkins overall London Plan comment 3: Digital Smart Response.

On particular points -

Developers of large scale developments should be required to model their development proposals in a City Information Model, to enable decision makers to assess the potential impacts of development using data that is openly available within the City Information Model. The aim would be to develop proposals that will be more resource efficient and drive sustainable ways of living.

Page:	Policy SI6 Digital connectivity infrastructure
Section:	SI6

Please see Atkins overall London Plan comment 3: Digital Smart Response.

Page:	Policy SI6 Digital connectivity infrastructure
Section:	9.6.7

Please see Atkins overall London Plan comment 3: Digital Smart Response.

Particular points -

We believe that the mayor should be the driving force behind developing a City Information Model that can be used to plan the future growth and development of the city. The London Plan can set the framework for this, by placing a requirement on Boroughs to model and plan their future growth 'digitally'.

Developers of large scale developments should be required to model their development proposals in the City Information Model, to enable decision makers to assess the potential impacts of development using data that is openly available within the City Information Model.

Page:	Multi-policy response
Section:	N/A

Atkins overall comment area 2: London Plan – Outer London Revitalisation

Commenting on Outer London revitalisation and Orbital movements that will help with this.

Atkins believe that revitalisation of outer London is a key issue that needs to be addressed in the London Plan, to ensure that London is maximising its potential and dealing with the inequalities that exist between inner and outer London. There a number of policies where the approach to outer London is either implied or explicitly referred to. However, unlike the CAZ there is no specific policy addressing the key spatial planning priorities for outer London, this is something that should be addressed in the redrafting of the London Plan. Atkins' report '*Future Proofing London'* called for a strategic programme to revitalise outer London and we feel that a specific outer London policy in the London Plan could help set the policy framework for this programme (our thoughts on what could be included in such a policy are set out below).

Our recognition of the challenge the Plan is attempting to address

Two of the primary concerns of the London Plan are in delivering enough homes to meet the needs of Londoners, so all have access to a decent and affordable home, and delivering jobs growth that enables all Londoners to prosper from the opportunities that the City offers.

Delivering on these complementary aims can often lead to competing pressures for land which need to be managed in a way that ensures London's urban development pattern remains mixed and sustainable. It also means that there is a need to consider how different parts of London are developed in a way that maximises the potential they offer, whilst ensuring that the inequalities that are evident across London (particularly between inner and outer London) can be addressed.

Our understanding of the Plan's approach here

Competing pressures for land mean that the London Plan encourages efficient use of land to ensure growth can be accommodated whilst protecting the green belt (para 1.2.1). This means creating neighbourhoods where space is used efficiently but also neighbourhoods that are better for people that use them. This will be achieved through developing a high density (in appropriate locations), a mix of land uses and co-locating different uses (so communities have a range of services and amenities). The Plan directs growth towards the most accessible and well-connected places, making use of existing and future public transport, walking and cycling networks. Use of brownfield sites and intensification of existing places is encouraged, including in outer London. The Plan acknowledges new transport links will play an important role in allowing intensification to happen (and helping to unlock homes and jobs) (para 1.2.5). This approach is set out in Policy GG2 – Making the best use of land.

GG5 Growing a good economy sets out the policy priorities for the economy. Policy GG5 does not directly reference outer London revitalisation, so it is not clear what approach the Mayor is seeking for outer London's economy. We believe the Plan (policy GG5) should address the unique role that outer London can play to help diversify London's economy and maintaining its global competitiveness. In particular London's small growth sector businesses can find it hard to compete for central London prime employment space, and business that help to support London's Central Activities Zone are being pushed out as commercial space is converted to residential. Outer London can help provide space for these economic activities. To do this London Plan policy needs to ensure that outer London can be adapted to the changing economic landscape London will see over the lifetime of the London Plan. This will mean ensuring a stock of employment land is retained in outer London to accommodate the businesses that support the functioning of the CAZ. There is also a need to think more creatively about how existing office locations in outer London meet the changing needs of businesses in the future as businesses in the growing creative industries sectors seek more flexible and adaptable space that is mixed with other uses and allows co-working.

The spatial development pattern that is promoted in the London Plan is key to delivering homes and jobs. There remains a focus on the Central Activities Zone (CAZ), but the plan identifies the potential of outer London, where the suburban pattern of development is appropriate for intensification over time (chapter 2, para 2.0.3 and Policy SD1). The London Plan is not clear on what would be an appropriate level of intensification in outer London and doesn't define appropriate intensification.

Policy SD1 – Opportunity Areas are those parts of London that will see significant change. The policy identifies clusters of opportunity areas within key growth corridors. Some of the opportunity areas are in outer London, and the plan makes it clear that growth within growth corridors will require major investment in transport and other infrastructure. The Plan has a clear focus on radial corridors that will link outer London opportunity areas with the CAZ, this is without doubt important: to help reinforce agglomeration benefits the CAZ offers; to improve connectivity (access to jobs) and improving capacity on transport networks. However, there is no consideration of the importance of investing in orbital connections (public transport of all types, as well as improved walking and cycling infrastructure) and how local transport improvements connecting suburban areas to outer London's opportunity areas and town centres will be key to helping all Londoner's access opportunities. We believe the London Plan needs to clearly support orbital connectivity in Policy SD1 and other parts of the Plan.

The plan acknowledges the connections of London with the wider area, policy SD2 and SD3 set out the importance of collaboration with authorities in the Wider South East (WSE) and the growth locations in the WSE. Figure 2.15 and paragraph 2.3.6 set out the infrastructure priorities that enable the WSE to connect to growth areas in London. The London Plan should also set out how outer London growth areas interact with the WSE as the plan does not currently refer to this at present.

The London Plan is very clear that it aims to accommodate all of London's growth needs within its boundaries (para 2.3.1) without intruding on its green belt or protected open spaces. Meeting London's needs within London places pressure on outer London Borough's in particular to accommodate growth, having a major impact in terms of intensification and through accommodating growth on small sites. We would question how realistic it is that outer London can achieve this significant growth through a heavy reliance on small sites alone, and would also suggest that if small sites can be brought forward in significant numbers, the London Plan needs to be clear on what sort of place outer London will become. Small site housing growth could have a significant cumulative effect on transport and other infrastructure, so this growth needs to be supported by appropriate infrastructure provision.

The Plan supports a town centre first approach (Policy SD6), with town centres acting as viable hubs for a range of uses (retail, leisure, culture, residential and business space), mixed use housing led intensification, and strengthening local character. Potentially this policy has significant implications for growth and redevelopment in outer London, the policy doesn't make any specific references to outer London.

Policy SD9 calls for strong, resilient and adaptable town centres, with town centre specific strategies. As acknowledged in the supporting text (para 2.9.1) the unique character of each town centre and the significant changes and restructuring that retail is facing, makes it crucial that a strategy is developed for each town centre. We support the development of town centre strategies that will enable a bespoke approach to the future development and growth of town centres. However, we do believe that the London plan's overall approach to retail established through SD7 Town Centre network needs to acknowledge the unique challenges that outer London town centres are facing, so that these town centres continue to remain the hub of their communities. As retail space needs change (in part due to greater levels of online shopping), there is a danger that town centres contract and become less viable as they become more residential focused, but as retail needs potentially reduce, there is an opportunity to increase leisure and cultural uses, to maintain viability and redress the imbalance of cultural resources in outer London compared to inner London.

Discussion on whether this or other approaches would be most effective, and the rationale for this

We support the approach to outer London intensification – where appropriate and where it is not just intensification to meet housing need (although this is an important aim). It must be about creating outer London centres that are revitalised with new opportunities for jobs, supporting infrastructure, and environmental and social improvements.

Policy GG2 – making best use of land. Seeks high density and mixed-use places, but under criteria a) there is no clear priority in the sources of land that are identified, so the criteria simply serves as a catch all as there are very few if any examples of land that don't fall under these categories. There could be a concern that it leads to high densities in locations that aren't appropriate (e.g. public sector or other land not well served by public transport). Criteria b) places a requirement on 'those involved in planning and development' to proactively explore the potential to intensify the use of land, including public land, to support homes and workspaces, particularly sites that are well connected by public transport, walking and cycling. The guidance in this policy is not clear, is the policy aimed at both local planning authorities and developers, it is not clear how those involved in planning and development are expected to show they have been proactive. The policy needs to clearly define what is meant by well-connected, so there is a clear link between connectivity and density of development and land use. The intent of the policy is good but how it will be implemented in practice needs more consideration.

Policy GG2 is not location specific (i.e. it's London wide), but in order to be more supportive of outer London's revitalisation there needs to be an acknowledgement that Outer London needs investment in public transport, walking and cycling to support intensification and more efficient use of land. Otherwise the implication is that efficient use of land (which is likely to mean development at higher densities) is only going to take place in areas that are well connected or have planned investments in place. Much of outer London is unfortunately poorly connected by rail and the tube network, which means without further investment outer London won't be able to make as big a contribution to accommodating London's growth as the London Plan envisages.

The Plan identifies re-using brownfield will remain crucial, but acknowledges vacant plots are now scarce and large former industrial sites are complex to redevelop (para 1.4.5). Small sites can be developed more quickly and enable smaller builders to enter the market. Building more housing as part of the development of town centres important as well, providing homes in well-connected places. Policy GG4 – delivering the homes Londoners need – states that those involved in planning and development are required in criteria d) to identify and allocate a range of sites, including small sites, supporting skilled precision manufacturing that can increase the rate of building, and plan for all necessary supporting infrastructure from the outset. We agree that small sites have a role to play in meeting some of London's housing needs, however the cumulative impacts of small developments need to be properly considered and planned for. It is important that the GLA work with the Boroughs to guarantee that small sites are planned for with supporting infrastructure in mind, and to ensure areas of outer London are not over developed without appropriate investment. We also agree that precision manufacturing can increase the build rate, and products such as Atkins off-site manufactured affordable housing 'Metro home' can help deliver the affordable homes Londoners need.

We also believe that the London Plan (policy GG4 and others) should consider the need for a wider pool of potential land to meet London's housing needs. In particular the Plan needs to consider whether, in outer London, areas of green belt that no longer fulfil the purposes of green belt can be redeveloped for other uses. There are opportunities to deliver new homes on green belt land whilst opening up the land to public access and improving the biodiversity of the land. The London plan needs to allow for this eventuality and consider London's green belt strategically, so that the green belt remains intact but does not represent an impediment to meeting London's pressing housing and other needs.

We agree with the London Plan's aim of conserving and enhancing London's global economic competitiveness and ensuring all Londoner's share in the economic success (i.e. tackling inequality) these were challenges we considered in detail in our Future Proofing London report. However, Policy GG5 Growing a good economy that sets out in general terms how this will be achieved, makes no specific reference to unique challenges of outer London and how economic diversification will be supported in outer London, at the same time, it should be acknowledged how outer London residents can be supported to access jobs locally or in other parts of outer London, as there is much focus on the importance of CAZ and the opportunities this provides. To support outer London we believe there is a need for an outer London policy that tackles outer London's unique challenges this should include:

- Creating connectivity for all within outer London – safeguarding and developing comprehensive orbital transport links, promoting interventions in walking and cycling infrastructure that help to link outer London's town centres.
- Densification of outer London suburbs – supported by a comprehensive plan to deliver the necessary infrastructure alongside new homes and commercial development and masterplanned so that existing character is respected.
- Supporting the outer London economy – by retaining and diversifying commercial premises (offices and other workspaces) so that outer London can attract London's growth sectors and support London's changing economy. Outer London should continue to be the location for affordable, adaptable and flexible business space.
- Revitalising outer London town centres - so that they adapt to a changing retail landscape by repurposing retail space, but that they remain the hub of their community, making sure the balance of residential against other uses is maintained and that leisure, community and cultural uses are focused on the town centre locations.

Policy SD1 Opportunity Areas places emphasis on growth corridors, such as Crossrail 2 (pages 36 - 43), growth corridors can provide an opportunity for outer London centres within the growth corridor, as the investment in transport infrastructure in these corridors can encourage commercial and residential development. It will be important that growth in these corridors is also supported by a wider package of infrastructure investment and due consideration to the role and function that they play, otherwise there is a danger that outer London areas increasingly become dormitory areas. To achieve this there needs to be an approach that enables protection of commercial and employment generating floorspace, and an adequate supply of new floorspace to come forward, promotion of affordable workspace policies should also be considered so that outer London can fulfil its role as providing a good supply of affordable and flexible business space.