

Strategic infrastructure led masterplan for Sevenside

Final masterplan

South Gloucestershire Council

November 2022

Sevenside Masterplan

Contents

Executive summary

Baseline findings	5
Baseline findings: Communities	5
Baseline findings: Natural environment and Green Belt	6
Baseline findings: Economy	6
Baseline findings: Transport and movement	6
Summary of issues and opportunities	7
Developing an ambitious vision for Severnside	8
Achieving an ambitious vision for Severnside	8
Interventions to achieve the vision	9
Delivering and funding the vision	11

1. Introduction 13

1.1. About the masterplan	13
1.2. Background and purpose	13
1.3. Approach for the study	14
1.4. Structure of the masterplan	15

2. Baseline findings 15

2.1. Location and context	15
2.2. Communities	16
2.3. Natural environment and Green Belt	18
2.4. Economy	22
2.5. Transport and movement	27

3. Issues and opportunities 34

3.1. Communities	34
3.2. Natural environment and Green Belt	37
3.3. Economy	40

4. Stakeholder engagement 43

4.1. Communities	43
4.2. Natural environment and Green Belt	44
4.3. Economy	45
4.4. Transport and movement	45
4.5. Other feedback	47

5. Summary of issues and opportunities 48

6. Developing a vision for Severnside 50

6.1. A vision for Severnside	50
6.2. Objectives	50

7. Achieving an ambitious vision for Severnside 54

7.1. Assessing options to achieve the vision	54
7.2. Strategy and rationale to achieve the vision for each area	54
7.3. Integrating the strategy into a coherent masterplan	57
7.4. Interventions to achieve the vision	62
7.5. Policy and partnership interventions	70
7.6. Policies, strategies and preparatory work	70
7.7. Working in partnership	70

8. Delivering and funding the vision 72

8.1. Immediate intervention priorities	72
8.2. Longer term interventions	72
8.3. Funding infrastructure	73
8.4. Delivery partners	73
8.5. Infrastructure delivery	74
8.6. Prioritising project interventions	75

9. Moving forward 78

Appendices 79



Appendix A.	Potential funding sources for delivery	80
A.1.	South Gloucestershire Council funding	80
A.2.	Regional Funding	80
A.3.	Government Funding	82
A.4.	Private Sector Funding	85

Executive summary

Severnside is a unique place in South Gloucestershire that has many strengths. These strengths need to be enhanced to benefit the people who live and work in Severnside and those who visit the area. A strategic infrastructure-led masterplan for Severnside is intended to realise the area's economic and environmental potential, respond to the challenges of climate change and embrace opportunities for change, providing resilience and capitalising on the area's unique characteristics.

The masterplan considers an area known as Severnside, that covers large parts of the Avonmouth and Severnside Enterprise Area (ASEA) a strategically important location for employment locally and regionally, the established communities of Pilning, Severn Beach, Redwick, Hallen, Over and Easter Compton and thriving leisure experiences at The Wave and The Wild Place Project. Located adjacent to the Severn Estuary, the area has a unique landscape and biodiversity. The area of Severnside does not have a hard boundary given the nature and influence of the surrounding areas, including the estuary, the ASEA that extends into Avonmouth and the neighbouring north fringe of Bristol.



Figure 1-1 - Severnside masterplan study area

The masterplan has been shaped through early stakeholder engagement and research that has created an informed evidence base. The evidence base contains an assessment of Severnside's existing geographical, economic, environmental and social context, which appreciates the local character and identity of the area.

The masterplan considers Severnside's **communities**, **natural environment and Green Belt** and **economy** as central to achieving successful regeneration and transformation. These

areas, and critically the movement to, through and between them (and areas beyond), underpin the proposed interventions.

The document is presented in the following sections:

Introduction: Sets out the purpose, background and approach taken to develop the draft masterplan.

Baseline findings: Presents a summary of existing baseline data for Severnside providing the existing context, an appreciation and understanding of the local character and identity, using a variety of sources including previous and existing studies in the area.

Issues and opportunities analysis: Informed by the baseline evidence, these key issues and opportunities informed the development of the vision and objectives for the masterplan.

Stakeholder engagement: Presents feedback from initial stakeholder engagement that has been used to inform the vision, option development, and validating the baseline analysis.

Summary of issues and opportunities: Takes the outputs from the evidence gathering, analysis and stakeholder engagement to present a summary relevant to all three areas of the masterplan—communities, natural environment and Green Belt and economy.

Developing an ambitious vision for Severnside: The vision and objectives of the masterplan, informed by the previous sections.

Achieving an ambitious vision for Severnside: Presents the strategy to achieve the vision through spatial concepts and recommended interventions.

Delivering and funding the vision: Presents the mechanisms for delivery, including an investment plan.

The masterplan builds on the strengths of the coastal communities and rural villages, the strong economic activity of the area and the unique natural environment whilst fully recognising the unique circumstances of flood risk and ecological issues in the area. These will need to be the subject of future feasibility testing to deliver the agreed vision for the area.

Baseline findings

The baseline findings are presented for each of the distinctive areas of Severnside: communities, natural environment and Green Belt, and economy, as well as an overarching theme of transport and movement that affects all three areas. Here are the headlines of the baseline findings, the details and evidence base of which can be found in the main report:

Baseline findings: Communities

- The local communities are located in a number of settlements across Severnside
- There are limited local amenities/facilities to serve local communities
- Severnside and its communities have had a varied history worthy of celebration
- A connection with the past is well-integrated into Severnside's townscape
- Severnside's communities are well-engaged with the area's unique cultural heritage

- Severnside's communities desire for regeneration of community facilities and have concerns over levels of traffic on unsuitable local roads

Baseline findings: Natural environment and Green Belt

- The Severn Shoreline and Estuary is an internationally and nationally important site
- Severnside is home to numerous important water bodies, ancient woodland, and protected species
- A large proportion of the Severnside study area is located within Flood Zone 3 – at highest risk of flooding
- Within Severnside, there are areas at risk of fluvial (river) flooding and other flooding
- Access to open space varies within Severnside
- As a flat, low lying tidally influenced area, Severnside is particularly susceptible to the effects of climate change
- Climate change will need to be factored into any decisions that have long-term effects
- Projects are already in the pipeline that will provide significant ecological benefits and present opportunities to develop strategic green spaces and waterways
- There are areas in Severnside that require river protection measures

Baseline findings: Economy

- The built form in the ASEA has experienced (and will continue to experience) extensive change
- Severnside presents an extremely attractive strategic location for logistics and distribution uses
- Severnside presents an attractive strategic location for low and zero carbon technologies
- There is currently no established office market at Severnside, nor is there predicted to be in the near future
- There are limited retail/leisure offers within Severnside
- The eastern area of Severnside is developing an emerging profile as a cultural/tourist destination
- Public sector land ownership is limited in Severnside
- There is expected to be a significant growth in employment uses within the ASEA
- The ASEA Ecology Mitigation and Flood Defence Project increases the suitability of commercial development within Severnside
- Proposed development in the east of Severnside will strengthen its appeal as a cultural and leisure destination
- Plans remain for a new deep sea container terminal at Bristol Port.

Baseline findings: Transport and movement

- The Severnside area benefits from excellent strategic links to the national motorway network and international shipping

- Access to the motorway network from within Severnside is not impeded by heavy traffic flows, but the local road network is more constrained and has high levels of use, including by HGVs that has caused deterioration.
- There is a lack of suitable lay-over facilities for HGV drivers.
- Bus services both inside and outside of peak times fail to offer a frequent level of service, particularly for those working within the ASEA
- Other bus services to and from Severnside offer a limited level of service and can be unreliable
- Bus infrastructure provision is not always suitably located
- Rail service provision in Severnside is limited
- Public transport network coverage is unlikely to encourage modal shift
- Contemporary cycling provision is located predominantly west of the M49 and is of varying quality
- The cohesion and quality of cycling provision deteriorates east of the M49
- Formal walking and wheeling routes and bridleways are limited west of the M49, with little provision within the ASEA
- Road and rail infrastructure separates communities in Severnside
- Community activity leads the way to promote and improve active travel options
- Proposed infrastructure improvements within Severnside will further enhance connectivity to the national motorway network

- Metrobus services will connect to the Severnside area
- Improvements to the existing rail service in Severnside are proposed
- There are active travel improvement schemes proposed
- Innovative transport solutions are to be trialled in Severnside

Summary of issues and opportunities

Taking the evidence from the baseline findings and from initial engagement with the community, businesses and other stakeholders, a summary of key issues and opportunities that are relevant for each area is as follows:

Connectivity and movement

A need to improve connections to, through and around Severnside by sustainable modes and ensure development of appropriate infrastructure to enable efficient movement.

Potential for growth

A need to support planned growth of the ASEA as a regional employment hub, balance the ratio of jobs to homes to reduce the need to travel and maximise the potential of the natural environment.

Identity and place

A need to recognise and promote Severnside's uniqueness and enhance this to attract people to live and work in the area and to visit.

Nature and wellbeing

A need to integrate and connect green spaces to provide wildlife corridors and increase access to nature.

Environment and resilience

A need to consider and increase resilience to the impact of climate change and enhance the unique environments and habitats in Severnside.

Developing an ambitious vision for Severnside

The development of the vision for the Severnside masterplan has progressed, initially developed from key themes in policy and existing work and through the engagement process. The vision is to recognise Severnside's unique communities and internationally important status, both environmentally and economically to attract and focus new investment.

The vision is underpinned by a number of distinct objectives, identified through the masterplan development process to ensure that the primary challenges associated with sustainable development of carbon net-zero and climate resilience, equality and diversity and economic growth are met. These are:

- Supporting existing communities
- Improving the purpose of and recreational opportunities of blue and green infrastructure
- Creating resilience against the impacts of climate change
- Supporting regional employment opportunities
- Protecting and enhancing the internationally important natural environment and habitats and responding to the nature emergency

- Contributing to South Gloucestershire Council's 2030 net zero carbon emissions target
- Improving access and movement
- Enhancing the identity and sense of place

Achieving an ambitious vision for Severnside

To achieve the vision, meet the objectives and respond to the issues, opportunities and feedback from the community and stakeholders, ambitious steps must be taken.

Differing levels of growth and interventions have been assessed for each of the three distinctive areas against how they meet the masterplan and wider policy objectives and address issues and needs of residents, businesses and stakeholders. The differing levels of growth and intervention options for each area that have been assessed are:

- Continue with planned developed with minimal intervention
- Small to medium scale growth with associated mitigation measures
- A level of growth that supports associated infrastructure interventions

A blend of these options has been considered most appropriate. This is because some areas require a level of growth to justify high levels of investment in transformative interventions to address some of the key challenges identified for Severnside.

The strategy to achieve the ambitious vision for each of the areas is:

Communities: Enable growth that will contribute towards meeting local housing needs, is close to jobs and creates wider demand and viability for improved local services and facilities and helps deliver key infrastructure.

Natural environment and Green Belt: Maximise the opportunity to enhance the unique estuary environment and improve green space networks to generate demand and income for better management, improve green links and enable conservation-based industry to become an asset.

Economy: Build upon the opportunity for existing growth in the Avonmouth Severnside Enterprise Area to continue the strengths as an industrial location and to densify jobs and diversify employment types in planned areas to create demand to invest in infrastructure to improve connectivity and attract more specialised jobs.

Integrating these three strategies into a coherent masterplan brings mutual benefits for each area across Severnside:

- Enables the viability to construct infrastructure to give greater resilience for existing and future communities.
- Enhances green spaces and manages watercourses to provide habitats, flood management and attractive areas for local communities, employees and visitors to enjoy.
- Creates demand for improved connectivity to, through and around Severnside by sustainable modes of transport.

- Creates more demand and viability for improved facilities to benefit communities, employees and visitors.
- Enables Severnside to become a sustainable, self-contained settlement to live, work and visit.
- Enhances the profile of Severnside in the region.

Interventions to achieve the vision

The main report presents concept drawings of how the strategy for each area can benefit Severnside as a whole. Ambitious interventions are required to make the step change to achieving the strategy and the vision of the masterplan. Here are the recommended infrastructure interventions, the rationale is detailed in the main report for each intervention:

Interventions

New and improved **footpaths and bridleways** including upgrades to lighting which will improve access to the Enterprise Area, Severn Beach and Pilning rail stations, existing communities and green spaces.

Continuous **cycle infrastructure** along all major routes to connect to key destinations within and beyond Severnside.

Provide **secure cycle parking** for residents, employees and visitors at key destinations, including bus stops and rail stations.

Improved **frequency and reliability of bus services** to residential and employment locations.

New bus routes (including demand responsive options) via Enterprise Area, existing and new residential areas.

Metrobus extensions to serve the ASEA, including extending services from Bristol and the north fringe of Bristol.

Work in partnership with Bristol City Council and the West of England Combined Authority to investigate the use of the **Portway Park and Ride for services to ASEA.**

Improve bus infrastructure, including waiting areas and travel information.

Shuttle bus services to connect to visitor attractions and provide links to the unique natural environment.

Severn Beach Station:

- Improvement to **rail services as part of MetroWest Phase 1¹ project** to increase train frequencies on the Severn Beach line
- **Provision of parking** to support rail-based park and ride
- Bus connectivity and **connections for the first and last mile to and from the station**

Pilning Station

- **Station improvements** are required to enable access to improved services, which should include an overbridge, and to improve waiting facilities
- Improved **rail services and connections for the first and last mile from the station**

Trial the use of mobility hubs to integrate transport options at bus stops and rail station to enable first/last mile connections, including e-bikes and e-scooters.

Highway connection to **M49 Avonmouth junction** from ASEA, including investigation into lorry lay-over facilities.

New strategic transport link connecting from ASEA to M5 Cribbs Causeway to provide a connection and prevent unsuitable through traffic accessing local roads, which then opens opportunities for sustainable travel improvements on local streets.

Investigate the development of schemes that prioritise safe, sustainable and local access over traffic passing through in existing and new residential areas, **known as liveable neighbourhood concepts.**

Series of small-scale interventions to **create physical and ecological links** between environmental assets. **Develop the tourist potential of the area**, e.g. observation and interpretation areas.

Provision of **shared use green spaces and corridors** to form integral hubs for social interactions within local communities.

Tree planting and/or providing more greenery along streets across the area.

Provision of **new local retail and community facilities**, including public or privately owned facilities and services such as gyms, food and beverage outlets.

¹ [MetroWest Phase 1](#)

Enhance existing community facilities to strengthen the position of local schools and community buildings to serve as hubs of the neighbourhood.

Carry out **feasibility work on a variety of aspects, including** to establish the potential locations for housing and other growth opportunities

Integrate **environmental and flood defence infrastructure** into existing communities, through green spaces and nature-based drainage systems for rainwater management.

In partnership with key stakeholders, **investigate the potential of intertidal habitats** in mitigating the impacts of climate change, i.e. to provide efficient and cost-effective solutions to help protect communities from coastal erosion, storms and flooding.

Upgrade existing drainage system to mitigate the risk of river flooding and to ensure that the system can operate functionally and without adverse impacts on the wider community with additional growth/development.

Upgrade power capacity in the Enterprise Area to meet increasing power requirements of large-scale logistics and industrial users, enabling full business functionality.

Investigate the potential for **wind energy and solar photovoltaic (PV) schemes** to build on existing council studies, and to ensure opportunities to identify and deliver different renewable energy resources in Severnside are pursued.

Provision of digital infrastructure, including the roll-out of superfast broadband.

Provision of appropriate **environmental smart technology**, to meet climate change challenges, i.e., water and energy consumption.

Significant gaps in infrastructure remain that have, to date, proved difficult to fill from public funding. This masterplan provides the basis for longer term interventions, and sets out policies and partnerships to be made to enable collaborative working across the Severnside community to achieve the vision.

In addition to the infrastructure interventions tabled, there are wider interventions that should be progressed. This strategic masterplan will pave the way for more detailed work to begin.

Delivering and funding the vision

To deliver the masterplan vision, consideration must be given to how the required infrastructure is delivered and provide a plan for investment and mechanisms for funding. The draft masterplan sets out a high-level assessment of the benefits of the interventions which will inform preparation of future projects and business cases for funding, and the rationale for public sector intervention to deliver the masterplan. This will be reviewed and re-shaped over the life of the masterplan and will take account of prevailing policies, funding opportunities and market and economic conditions.

Immediate priorities are identified for delivery, including progressing some interventions which would act as a catalyst for the longer-term interventions. Many immediate priorities are likely to be policy, partnership and promotion based interventions as

opposed to heavy infrastructure projects given the low cost and short timescale. However, they will demonstrate that the local authority and its partners are intent on implementing the masterplan.

Sources for funding and mechanisms for delivery, including partnership working to deliver key infrastructure, are presented that consider approaches led by the market, strategic infrastructure investment and targeted project interventions. Recommendations on how to prioritise project interventions are also made.

The draft masterplan establishes a **clear vision and objectives** to work towards over the longer term in partnership with the local community, businesses and key stakeholders. The strategy for achieving the vision and meeting the objectives is ambitious, however it is required in order to create the step change to address the issues and needs experienced in Severnside.

Moving forward, interventions have been identified to begin to realise the vision, recognising the need to begin early feasibility and preparatory work for some of the longer-term infrastructure schemes, but also for short term priorities to build partnerships with the community, businesses and organisations to work together to achieve the vision.

1. Introduction

1.1. About the masterplan

Sevenside is a unique place in South Gloucestershire that encompasses many strong functions and assets. These strengths need to be amplified and enhanced to collectively benefit people that live, work and visit the area. A strategic infrastructure-led masterplan for Sevenside (hereafter referred to as the masterplan) is intended to realise the area's economic and environmental potential, respond to the challenges of climate changes and embrace significant opportunities for change, adaptation, providing resilience and capitalising on the area's unique characteristics.

The masterplan is intended to consider, with the local community of residents, businesses and other stakeholders, a place shaping vision and ambition for Sevenside in the medium to long term (up to 2050) which will build on the distinct strengths of the coastal communities and rural villages, strong economic activity and unique natural environment. The masterplan will help set a framework for future infrastructure ambition. This will be facilitated through infrastructure investment, innovative transport solutions and high-quality open spaces, whilst balancing this against protecting and enhancing Sevenside's nationally and internationally renowned natural environment and supporting existing communities in the area. New green technologies should to be explored for example, as well as other opportunities to provide greater resilience to the impacts of climate change.

The masterplan builds on the strengths of the coastal communities and rural villages, the strong economic activity of the area and the unique natural environment whilst fully recognising the unique

circumstances of flood risk and ecological issues in the area. These will need to be the subject of future feasibility testing once the vision for the area has been agreed.



A view of the Severn Estuary from Severn Beach

1.2. Background and purpose

In September 2021, South Gloucestershire Council commissioned Atkins to develop a strategic infrastructure-led masterplan for Sevenside. Atkins has been supported by expert property market and delivery consultants Avison Young.

The masterplan has been shaped over its development through early public engagement and is rooted in an informed evidence base. The evidence base contains an assessment of Severnside's existing geographical, economic, environmental and social context, which appreciates the local character and identity of the area. Previous and ongoing **studies** for the area have further informed the evidence base, together with findings from targeted stakeholder engagement.

The masterplan considers Severnside's **communities**, **natural environment**, **Green Belt** and **economy** as central to achieving successful regeneration and transformation. These three areas, and critically the **movement** to, through and between them (and areas beyond)², underpin the proposed interventions. These offer strategic direction to help guide and control the development of land in the future.

The masterplan describes the direction of travel for future infrastructure improvements. It presents a vision for Severnside and strategic spatial concepts. Critically, these concepts do not represent final designs – rather, a place-based strategy upon which future design and partnership working can be based. The masterplan builds on earlier plans and strategies, all of which have informed the evidence base and option generation process. It is intended to help inform and guide future plans, such as South Gloucestershire Council's emerging Local Plan and any other detailed future policies or plans for transformation of specific areas or aspects within the area.

Infrastructure improvements will be delivered at different timescales. The masterplan sets out improvements that could be

delivered in the short term and those which may take longer to deliver. For the latter, it may be that these improvements will need to be delivered in progressive phases. More details of how the vision can be delivered are included in the *Delivering the vision* section.

1.3. Approach for the study

The approach has been developed to put people, place and the natural environment at the heart of the vision. The goal of the masterplan is to become a reference document for future steps towards infrastructure improvements in the Severnside area. It will drive a coherent and consistent approach to future infrastructure improvements. It will guide future detailed plans, studies and technical feasibility work, from which infrastructure improvements can be developed and implemented. In doing so, the masterplan serves as the starting point of a journey that will see a coherent regeneration and transformation of the Severnside area, providing the strategic steer to realise its great potential.

The masterplan represents the final output of a three-stage process:

Baseline Report (2022), which provides an evidence base for the existing situation at Severnside and presents initial discourse with regard to emerging themes, opportunities and constraints.

Options Report (2022), which presents the options available to the progress of the masterplan and establishes how infrastructure improvement packages have been investigated and refined.

² For example, in the case of Severnside's economy, this includes significant employment bases.

Masterplan (this document), which presents the final spatial and infrastructure improvement recommendations to guide the direction of travel in the medium to long term (up to 2050).

1.4. Structure of the masterplan

The masterplan is presented in the following sections:

Baseline findings: Presents a summary of existing baseline data for Severnside providing the existing context, an appreciation and understanding of the local character and identity, using a variety of sources including previous and existing studies in the area.

Issues and opportunities analysis: across the Severnside area informed by the baseline evidence. These key issues and opportunities informed the development of the vision and objectives for the masterplan.

Stakeholder engagement: Presents feedback from initial stakeholder engagement that has been used to inform the vision, option development, and validating the baseline analysis.

Summary of issues and opportunities: Takes the outputs from the evidence gathering, analysis and stakeholder engagement to present a summary relevant to all three areas.

Developing an ambitious vision for Severnside: The vision and objectives of the masterplan, informed by the previous sections.

Achieving an ambitious vision for Severnside: Presents the strategy to achieve the vision through spatial concepts and recommended interventions.

Delivering and funding the vision: Presents the mechanisms for delivery.

2. Baseline findings

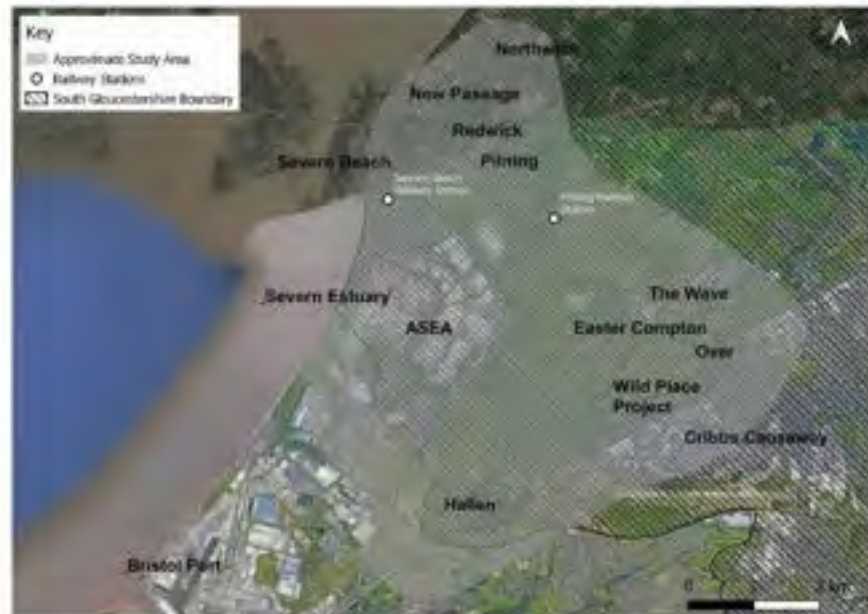
2.1. Location and context

The masterplan considers an area known as Severnside, that covers large parts of the Avonmouth and Severnside Enterprise Area (ASEA) a strategically important location for employment locally and regionally, the established communities of Pilning, Severn Beach, Redwick, Hallen, Over and Easter Compton and thriving leisure experiences at The Wave and The Wild Place Project. Adjacent to the Severn Estuary, the area has a unique landscape and biodiversity. The masterplan boundary is not a hard edge, given the nature and influence of the surrounding areas, including the estuary environment, the ASEA that extends into Avonmouth and the interfaces with activity in the north fringe.

A large part of the ASEA is within the area of focus, it is a strategically important location for employment locally and regionally and provides a platform to promote further investment. Its position on the strategic transport network with links to the M5, M4, rail and the Port of Bristol has attracted and retained major employers and international organisations.

Committed schemes have been identified through the interrogation of existing reports and planning documents. Longer term options have been identified through engagement with council officers across the combined authority and its unitary authorities to understand emerging opportunities across all sectors. By taking a step back to understand the current direction of travel for each sector in the Severnside, these ideas can be built upon to develop a new ambitious and better-connected vision for Severnside as a whole, up to 2050.

Figure 2-1 - Severnside masterplan study area



Source: OpenStreetMap contributors

2.2. Communities

The residential population is spread amongst the established communities of Pilning, Severn Beach, Redwick, Northwick, New Passage, Easter Compton, Hallen and Over.

The local communities are located in a number of settlements across Severnside

Severnside has a population of approximately 5,900 residents³. The communities of Pilning, Severn Beach and Redwick represent the most consolidated residential population in Severnside, located in the north of the area adjacent to the Severn Estuary. Despite having the most consolidated populations, Pilning, Severn Beach and Redwick, along with all other settlements in Severnside have a rural setting. These communities are fairly remote from other places in the region; from our engagement workshops, the rural setting of these communities adds to their appeal. Though the population has grown⁴, there has been limited expansion of these settlements in recent years. Where change has occurred it has usually comprised of change of use schemes, or the demolition of existing buildings in situ to be replaced with a small number of (up to 5) dwellings. It is possible that small scale infill-type residential developments in these settlements could come forward in the forthcoming years, in line with current market conditions and existing planning policies.

There are limited local amenities/facilities to serve local communities

Severn Beach and Pilning have a small mix of local public amenities, including a part-time community library, GPs, primary schools and village halls. Pilning village hall is managed by the Parish Council and Severn Beach village hall is managed by a Trust. There are fewer local public amenities in Over, Hallen and Easter Compton, the latter two have their own village halls, and

³ Nomis, *Population estimates* (2021).

⁴ Growth in Severnside from 2011-2021 (approximately 8%). Nomis, *Population estimates* (2021)

there are other amenities shared across all settlements, including public houses (although none in Severn Beach), recreational facilities (sports pitches) and a small number of shops. There are two primary schools: Pilning and Severn Beach and three places of worship in Severn Beach and Pilning and two further places of worship in Easter Compton.

Much of the local convenience stores and cafes are dated from 1948⁵. From our engagement workshops, it was noted that there are other facilities within the area that may require updating, including the village halls and primary school in Severn Beach. The condition of some facilities may inhibit their attractiveness and value amongst the community.

Sevenside and its communities have had a varied history worthy of celebration

Severn Beach has had a particularly varied history, celebrating its centenary in 2022. Once of national prominence, the development of a single-track goods line across the Severn shoreline had seen a local entrepreneur called Robert Stride observe that Severn Beach (as it would come to be known) offered considerable potential to emerge as a thriving riverside resort. By the early 1920s, publicity was ripe, and the first trains ran from Bristol to a new platform at Severn Beach. Tourism became a huge attraction, with a wealth of traders setting up stalls, and amusement parks and swimming pools being developed⁶. The first summer of operation saw over 70,000 people take the train to Severn Beach⁷.

Severn Beach's popularity would eventually wane. The Second World War and the emergence of package holidays meaning that

by the 1960s, many of the attractions that had made it famous were demolished. Today, the scene at Severn Beach is much more understated, but there is a pride amongst residents about its history – with an active local history group within the community (The Pilning and Severn Beach History Group).

A connection with the past is well-integrated into Sevenside's townscape

Severn Beach and New Passage (1750m to the north of Severn Beach) benefit from bespoke heritage trails. The heritage trails are well sign-posted and can be supplemented with an informative leaflet (available online⁸). They lead visitors through a variety of sites of historical significance, all of which are well-integrated into the townscape. They, and several other non-designated heritage assets within Sevenside, make a significant contribution to the character of the area.

There are other significant heritage assets which form an integral part of Sevenside's townscape, including the Hallen war memorial. This Grade II listed structure is in the centre of Hallen village. In Pilning, there is also a war memorial which forms an integral part of the townscape.

⁵ CoStar (2021).

⁶ [To be beside the sea: The life and times of Severn Beach - The Bristol Magazine Online](#)

⁷ Ibid.

⁸ [Severn-Beach-Heritage-Trail-Leaflet.pdf \(aforgottenlandscape.org.uk\)](#)



Pilning war memorial

Severnside's communities are well-engaged with the area's unique cultural heritage

Much of the Severnside area benefitted from the A Forgotten Landscape (AFL) project – a large-scale natural and cultural heritage project funded by the Heritage Lottery Fund Landscape Partnership Scheme. The project ran from March 2015 to October 2018 and sought to conserve and enhance the Lower Severn Vale Levels, an area of low-lying floodplain along the shore of the Severn Estuary, while improving community access to and engagement with the area's unique natural and cultural heritage.

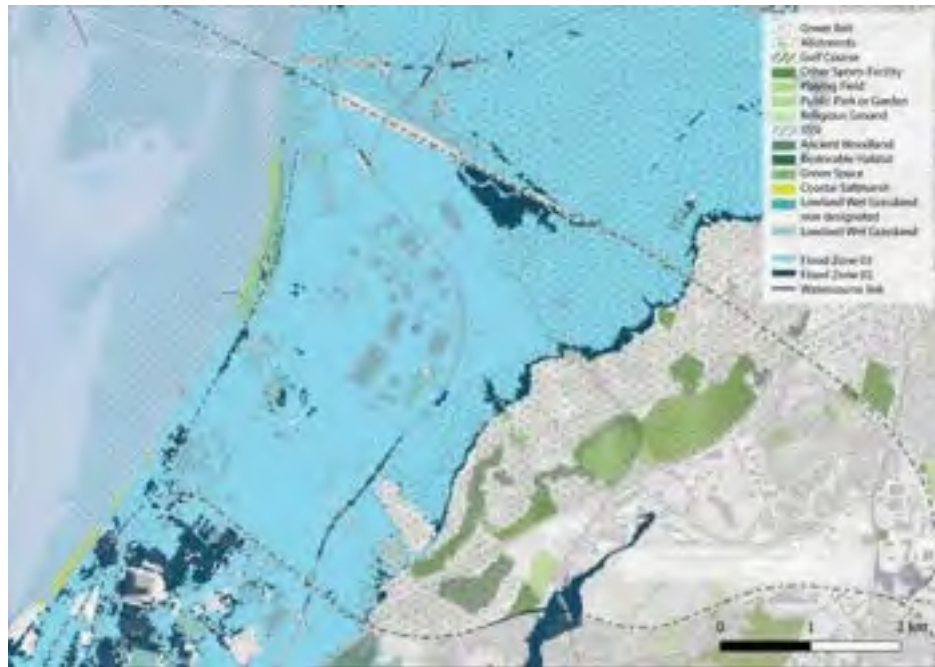
Severnside's communities desire for regeneration of community facilities and have concerns over levels of traffic on unsuitable local roads

Residents have a strong sense of place in their communities and a desire for regeneration is clear; several community groups are, actively campaigning for regeneration of community facilities within their locality, which includes the development of the emerging Pilning and Severn Beach Neighbourhood Plan. Respondents of the Neighbourhood Plan survey show that residents are increasingly concerned over regeneration of commercial sites encroaching into residential areas and raise issues of the levels of heavy goods vehicles and commuter traffic travelling through unsuitable local roads.

2.3. Natural environment and Green Belt

Severnside has a rich landscape, and there are several national and international statutory environmental designations which contribute to its natural environment and make a major contribution to the national and regional character.

Figure 2-2 - Natural environment, green spaces and waterways



Source: OpenStreetMap contributors

The Severn Shoreline and Estuary is an internationally and nationally important site

The Severn Shoreline and Estuary, located to west of Severnside, supports a wealth of habitats and species of national and international nature conservation importance. The estuary has one of the most extensive intertidal wildlife habitats in the UK, comprising mudflats, sandflats, rocky platforms and priority habitats of coastal salt marsh and coastal and floodplain grazing marsh. These habitats support significant numbers of over-

wintering wildfowl and waders. Notably, seven species of migratory fish pass through the estuary.



The Severn Shoreline and Estuary, taken from Severn Beach

Severnside is home to numerous important water bodies, ancient woodland, and protected species

Severnside has a varied landscape, with a significant number of deciduous woodland areas, many of which are ancient woodlands. Many of these areas make a significant contribution to the landscape character of the area and provide habitat for notable species.

Arable farmland is also prominent in the east of the area, providing nesting opportunities for ground nesting birds. The farmland areas across Severnside have other benefits; although large stretches of intensive farmland can form ecological deserts, the lack of road or rail infrastructure that penetrates across the wide open spaces of Severnside makes it relatively easy and safe for wildlife to move through the landscape.

To the west of Easter Compton, there are several rhines of local and regional ecological importance. They – together with a number of other watercourses, including natural brooks, streams and channels – contribute to a significant number of watercourses within the area.

A large proportion of the Severnside study area is located within Flood Zone 3 – at highest risk of flooding

The highest risk zones are mostly in the area next to the Severn Estuary, including the ASEA, the villages of Severn Beach and Pilning, as well as a number of smaller settlements. Eastern areas of Severnside – those in closest proximity to the M5 – are located in Flood Zone 1, considered at low risk of flooding.

Tidal flooding constitutes a significant risk, because the Severn Estuary has a high tidal range – the second highest tidal range in the world. Severnside has suffered from major tidal flooding in the past, most recently in 1981. This led to the construction of tidal defence improvements along the Severn Estuary.

Within Severnside, there are areas at risk of fluvial (river) flooding and other flooding

The risk of fluvial (river) flooding is significant in Severnside from the many rhines that cross the area. Ordinary watercourses may pose localised fluvial flood risks but are more difficult to predict. In

addition to tidal and fluvial flood risks, there are other sources of flood risk to the Severnside area, including surface water ponding / pooling, groundwater and at some locations, sewer flooding.

Access to open space varies within Severnside

Severnside largely comprises of an open agricultural landscape, with a mix of pasture and arable fields much of which is accessible by Public Rights of Way (PRoW). Large amounts of accessible open space are therefore identifiable in and around the eastern area of Severnside, including Easter Compton and Hallen. These areas offer potentially high value for wildlife permeability.

Despite much of the ‘formal’ nature and green space, such as the land at Bristol Golf Club and the Wild Place Project being inaccessible to the general public (sited on private land, requiring payment to enter), local communities in this area generally are well-served by open space, including scenic countryside.

The communities of Severn Beach, Pilning and Redwick benefit from considerable access to open space, however, ‘formal’ green space is less prominent. A significant allotment site is in Severn Beach, as well as a children’s play area and football pitches adjacent to the village hall and there are playing fields in various settlements of Severnside; these shared community green spaces are paramount in developing a sense of place within an area.

Green infrastructure and public open spaces within the ASEA are limited and the area is not served by Public Rights of Way.

A changing climate and coast

Climate change poses a clear and urgent challenge, affecting the future environment and prosperity of Severnside and the wider West of England region. Both South Gloucestershire Council and the Combined Authority have taken significant action in order to

tackle the current climate emergency and begin to make assertive steps towards the National Government's push for a low / carbon neutral economy, pledging to become carbon neutral by 2030.

As a flat, low lying tidally influenced area, Severnside is particularly susceptible to the effects of climate change

The Severnside area is within an 'area benefiting from defences' (ABD), but the requirement to consider climate change and residual risk means that flooding potentially poses a major constraint on development.

Upgrades to the existing flood defences are being facilitated through the Avonmouth Severnside Enterprise Area (ASEA) Ecology Mitigation and Flood Defence Project, which aims to protect the ASEA to enable development. Whilst the project will also provide protection for some coastal communities, the scheme is not intended to protect potential new residential developments, which will be subject to sequential testing and feasibility work to understand the risk of flooding and the suitability for new development. Whilst this reduces the risk of flooding in the study area, it is our understanding that the designation of the Flood Zone 3 area will not change as a result of the ASEA Ecology Mitigation and Flood Defence Project.

The extent of surface water flooding is also likely to increase with climate change across South Gloucestershire. Hallen has been identified as an area particularly sensitive to increases in rainfall intensity, with the village expected to experience an increase of more than two times the number of properties at risk of flooding. Pilning has also been identified as an area at significant risk of surface water flooding.

Climate change will need to be factored into any decisions that have long-term effects

This is particularly relevant when considering future infrastructure improvements, to avoid often costly remedial actions in the future. Consideration must be given to low probability but high impact events arising from, for example, high warming scenarios and interdependent or cascading risks.

Carbon emissions have not been assessed in this masterplan; an assessment of year-by-year emissions together with the carbon budget could serve to inform a greater understanding of the challenges of future growth.

Projects are already in the pipeline that will provide significant ecological benefits and present opportunities to develop strategic green spaces and waterways

A minimum of 85 hectares of new wetland habitat in the Hallen Marsh (just to the south of the study area) and Northwick (just to the north of the study area) will be created as part of the ASEA Ecology Mitigation and Flood Defence Project. This will include wet grassland to encourage wading birds and open water to encourage wildfowl. To facilitate this, a number of different methods will be used to create the habitat, including new ponds and scrapes (areas of shallow water) over the winter months.

Furthermore, whilst noted to be at the concept stage, the String of Pearls programme aims to connect and restore wetland habitat of the protected Ramsar area of the low-lying vales and coast of the Severn Estuary. The programme will support the resilience of the area and improve public amenity. The programme will deliver the wetland Nature Recovery Network (NRN) in the area. South

Gloucestershire Council's Green Infrastructure Strategy (2021)⁹ includes a commitment to progressing the programme to a full business case to link and restore wetland sites and habitat across the Severn Vale levels through their strategic GI projects pipeline portfolio.

There are areas in Severnside that require fluvial protection measures

Within Severnside, there are a number of areas at risk of fluvial (river) flooding. These may pose a significant risk given the number of watercourses present across the area. It is understood that the area is drained by gravity in an effective way but at some point, without further development of the network, this may start to fail. Therefore, the network is considered likely to need development at some point through natural flood management measures and / or a likelihood for active pumping as a last resort.

2.4. Economy

A sizeable section of the ASEA is located within Severnside. Severnside therefore represents a strategically important location for employment uses at both a regional and local level. The ASEA designation provides South Gloucestershire Council, Bristol City Council and the Combined Authority with a platform to promote inward investment and business rates retention over 25 years of which approximately 17 years are remaining, which is used to fund economic infrastructure projects. The ASEA (and the rest of Severnside) also sits within the Western Gateway Partnership¹⁰. The area is home to the major distribution parks of Central Park

and Western Approach, which house major distribution centres for international firms such as Amazon, Lidl, Tesco and DHL.

The built form in the ASEA has experienced (and will continue to experience) extensive change

Several developments in the area have taken advantage of extant planning permissions that were granted to ICI (Imperial Chemical Industries) in 1957/58. ICI, the former landowner, has developed part of their estate for fertiliser and pharmaceutical manufacturing on Central Avenue and these sites are now being redeveloped. The consent for the northern part of this major development was replaced by ICI with their Western Approach Distribution Park application. This permission was granted consent in 1995 and is now almost complete. Together, the 1995 and the 1957/58 consents cover approximately 1,000 acres.

Under the 1957 consent, permission was granted to develop the coastal strip and out into the estuary. Part of that consent was rescinded by the 1995 consent, under a S106 agreement between ICI and Northavon District Council and Avon County Council. The nature of the 1957/58 permissions is unusual in the most of the yet undeveloped areas can still be implemented without the need for a further planning application (the exception being the perimeter area and the margins of the roads listed in the original consent).

⁹ South Gloucestershire Council, *Green Infrastructure Strategy 2021* (2021).

¹⁰ A cross-border economic partnership of Local Authorities, City Regions, Local Enterprise Partnerships and Governments (in Wales and Westminster), working together to bring additionality to the area's existing strategies and structures.

Figure 2-3 - Map of the 1957/58 planning consents and map key



REFERENCE	
1	SO 4244. Permission for: (a) The construction and operation of factories for the production of chemical and allied products (including non-ferrous metal) (b) For the development mentioned under (2) & (3) below Approx 1850 acres in total. Dated 27-11-57
	SO 4244.8. Permission for: As above Approx 20.85 acres. Dated 30-7-58
2	SO 4244. Permission for: (a) The construction and operation of offices, warehouses, stores, reservoirs, showrooms, canteens, clubs, hotels, training establishments, amenities and welfare buildings, sports pavilion and sports and playing fields (b) For the development mentioned under (3) below Approx 545 acres
	SO 4244.8. Permission for: As above Approx 17 acres
3	SO 4244. Permission for: Construction and operation of any buildings, structures, erections or engineering works expedient for and arising to the construction and operation of the factories mentioned in (1) above other than buildings, structures or erections in which actual processes of manufacture are carried on Approx 1500 acres
4	SO 4363/4. Consent to Phibrochemical Ltd for extraction of dry gases with area 67 acres Land now available (net of gas plant) 55 acres approx. Dated 28-4-72
5	SO 4362/1. Consent for Natural Gas Liquefaction and Storage plant Approx 62 acres. Dated 27-10-72
	Extent of existing ICI plant 233 acres (not including gas for steel)
	Land zoned for industrial development but not yet with the benefit of a planning consent. Previous applications refused at this site (the area 14-25 acres). Area developed 4.44 acres. Area suggested for development 1.952 acres
	Existing refuse disposal site (under the control of the Council) 1000 acres
	Part of the land on which the existing gas plant is situated

Sevenside presents an extremely attractive strategic location for logistics and distribution uses

Growth of the logistics and distribution market in Sevenside has been substantial, owing to the extant planning permissions, Sevenside's strategic location, excellent motorway connections and other factors. Sevenside also presents an attractive location for other specific employment uses (including light and heavy industrial, storage and trade counters¹¹). Development associated with these uses has become typical of the area. This market trend is expected to continue – as noted above, much of the employment land which is currently developable is already being marketed to occupiers and a large element has already been serviced allowing immediate construction under historic planning consents. The principal offer is speculative warehousing (built in advance of a tenant being identified) and designed to suit warehousing in very large units over 10,000 sqm.



An example of the type of warehousing units prevalent in the ASEA

Sevenside presents an attractive strategic location for low and zero carbon technologies

Sevenside increasingly acts a major cluster location for the West of England's circular economy / low carbon businesses, with numerous existing low and zero carbon technologies located within and in close proximity to the ASEA. These include Sevenside Energy Recovery Centre, which utilises energy from waste incineration (EfW), onshore wind turbines sited at 8010 Western Approach, and a 7 hectare solar farm located immediately to the

¹¹ Premises that sell goods to tradespeople and businesses at a reduced price to public sales.

east of Severn Beach. The landfill site located at Berwick Farm also harnesses energy from landfill gas. In addition to this, a solar farm has been consented at land to the west of The Wave. Moreover, just to the south of the Severnside boundary, Viridor operate the Avonmouth Resource Recovery Centre – a plastic recycling and reprocessing plant.

The potential contribution of future energy generation (with an expectation on renewable sources) from the Severnside area is significant. SevernNet¹² has created a vision¹³ for circular economy opportunities, recognising the need for change that can be developed in the ASEA for wider learning and roll out.

There is currently no established office market at Severnside, nor is there predicted to be in the near future

Severnside has little or no stand-alone office stock, although many of the large logistics buildings in the ASEA contain significant office components. Office rents in Avonmouth are not lucrative, reflecting the generally poor quality stock, as well as the location that is difficult to access without a car. There is currently no speculative office development out of town, even in prime locations such as Aztec West. It is therefore considered unlikely that office development would be sought in Severnside. This has resulted in a lack of diversity in jobs in Severnside, particularly in technical, highly skilled sectors.

There are limited retail/leisure offers within Severnside

Within Severnside, there is a small range of local convenience stores and cafes to serve the local population. There has been a

slight increase in retail development in Severnside. A Travelodge hotel has recently been developed at Western Approach, in close proximity to the new M49 junction. Planning permission has been granted for a new McDonalds drive-thru directly adjacent to the new hotel, along with a petrol filling station and associated convenience store.

The eastern area of Severnside is developing an emerging profile as a cultural/tourist destination

Bristol Zoo's Wild Place Project and The Wave, an inland surfing destination, are located in close proximity to Severnside's boundary with the Bristol urban area. They are both recently developed attractions, increasing the number of leisure attractions in the locality which already includes Bristol Golf Club, amongst others. These developments form part of a growing cluster of visitor and cultural attractions on the north fringe of the city region, including the Mall shopping centre and leisure park, Aerospace Museum, ice rink, and the proposed Brabazon arena.

¹² SevernNet are a not-for-profit enterprise run by, and working for, the benefit of local businesses and the community. SevernNet serves the Royal Portbury Dock, Avonmouth and Severnside areas.

¹³ Pathway to the future- SevernNet Circular Economy Zone (CEZ) March 2021 Summary Report



The Wave – entrance point

Public sector land ownership is limited in Severnside

There is limited public sector land ownership within Severnside, with the exception being the coastal fringe which is managed as flood defence and habitat. This contrasts with Avonmouth and the docks area, where Bristol City Council is historically a major landowner.

There is expected to be a significant growth in employment uses within the ASEA

Owing to the nature of the extant planning permissions and subsequent alterations made by the Section 106 agreement in the ASEA, there is expected to be significant growth in employment uses in this area of Severnside. Several large sites are observed to be in the early stages of the development process, having been released later or having market challenges to overcome, or are currently under construction.

If all of these sites were to be utilised for logistics and distribution uses, around 8,000 jobs would be created¹⁴. If higher density employment uses were to be included, along with a significant proportion of logistics and distribution uses, then the number of jobs created could reach around 12,000. Comparing this to the number of households in Severnside, which is around 2,254¹⁵ demonstrates the imbalance between jobs and homes in the area.

The ASEA Ecology Mitigation and Flood Defence Project increases the suitability of commercial development within Severnside

The ASEA Ecology Mitigation and Flood Defence Project is a joint partnership project with South Gloucestershire Council as the lead partner, Bristol City Council as a partner and the Environment Agency as a partner and delivery partner. The project will deliver new flood defences for the Avonmouth / Severnside area, and is due to be completed in 2026/2027. Construction has begun.

The project seeks to ensure that tidal flood risk is reduced through to 2098. The new flood defences therefore increase the suitability of commercial development with a 60 year lifetime in the area. The

¹⁴ Invest in Bristol and Bath

¹⁵ Census 2011

National Planning Policy Framework (NPPF) requires residential development to demonstrate the site is safe from flood risk, including the predicted effects of climate change, for 100 years (the residential lifetime of development). The project is therefore not intended to protect potential new residential developments, which will be subject to sequential testing and feasibility work to understand the risk of flooding and the suitability for new development.

The project is intended to support the growth of the ASEA. It is designed to help give businesses confidence to invest.

Whilst the project mitigates against increases in flood risk from the impacts of climate change, it is understood that flood zone designations in the area are unlikely to change.

Proposed development in the east of Severnside will strengthen its appeal as a cultural and leisure destination

The new Bristol Zoo is proposed to open in 2024 at the Wild Place Project, including a new conservation breeding centre and conservation medicine centre. Public consultation on the plans for the new Bristol Zoo took place in early 2022.

Plans remain for a new deep sea container terminal at Bristol Port

Consent has previously been given by the UK government for the construction of a deep sea container terminal at Bristol Port. Plans allow for the terminal to bring the largest container vessels closer to UK markets. Whilst Bristol Port Company (BPC) remains convinced by the project, they note that the recession has led to a downturn in demand in the short term such that it is now envisaged

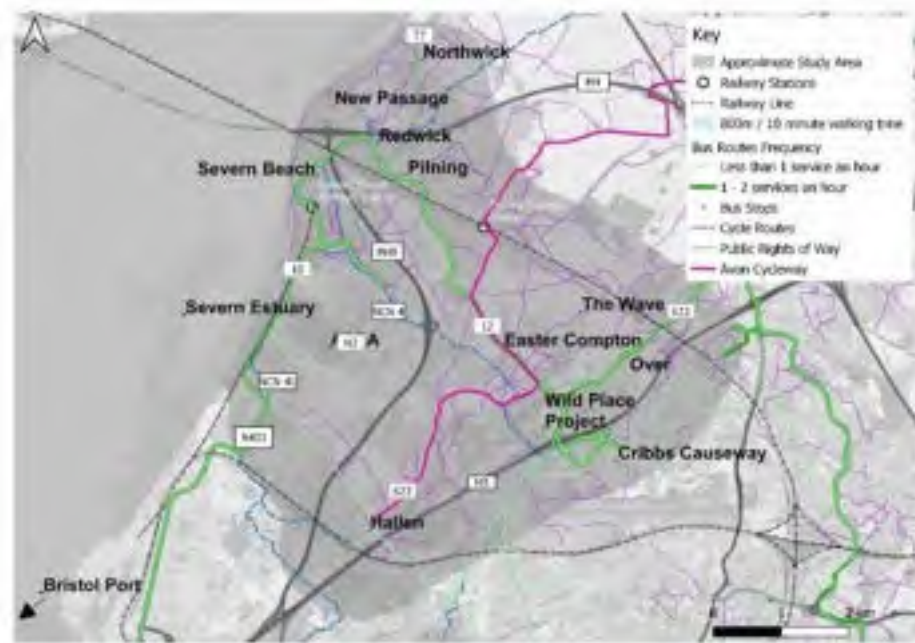
that the authorised works may not be completed (or all parts substantially commenced) within the ten-year period currently allowed by the consent Order, which expired on 31 August 2020. BPC has therefore applied for a ten-year extension¹⁶.

2.5. Transport and movement

Current transport and movement infrastructure is presented in Figure 2-4.

¹⁶ [Deep Sea Container Terminal | The Bristol Port Company](#)

Figure 2-4 - Transport and movement infrastructure



Source: OpenStreetMap contributors

The Severnside area benefits from excellent strategic links to the national motorway network and international shipping

The M4, M5 and M49 motorways are all accessible from Severnside, providing considerable benefits to the area. Bristol Port is located within the ASEA and is connected to the West of England directly by motorway to London, Birmingham, Manchester and South Wales, as well as with international

¹⁷ Regular services exist to and from key international destinations, including Bilbao, Antwerp, China and the Far East. An export service to the US is also available.

markets in Europe and beyond¹⁷. However, the motorway network around Severnside often experiences delays at peak times, particularly during periods of seasonal demand and when parts of the motorway network are closed due to incidents, which puts pressure on local roads through Severnside that are used as a diversion.

Access to the motorway network from within Severnside is not impeded by heavy traffic flows, but the local road network is more constrained

Access to the motorway network from within Severnside is not constrained by heavy traffic flows, particularly at peak times. No barriers are therefore present for freight access, with significant congestion only observed on the wider motorway network.

Congestion increases occasionally on the A403 (the primary connection between Severn Beach and Avonmouth), though these instances are localised and generally, it is relatively free flowing.¹⁸ From our engagement workshops, the local road network is considered to be more constrained by heavy traffic flows, as well as suffering from deterioration. This is perceived to be from the considerable use of the local road network by HGVs and other freight.

As measured from the A403 access into Western Approach, the core Severnside employment area is approximately 4-5 miles from direct access to the strategic road network at M5 Junction 17, Junction 18 or M48 Junction 1. These connections are mostly via a single carriageway road through villages and some subject to a 7.5 tonne weight limit. The high levels of use of these local roads has caused the quality of the roads to deteriorate and are often

¹⁸ Information obtained from the West of England Transport Model, which utilises observed Teletrac 2019 traffic delay data.

used as diversion routes during periods of seasonal demand and when parts of the motorway network are closed due to incidents.

There is a lack of suitable lay-over facilities for HGV drivers

The high number of HGV movements through Severnside demonstrates the need to improve facilities for HGV drivers to lay over when taking a break from driving. There is a lack of such facilities in the Severnside area, resulting in reported ad-hoc parking and activities in unsuitable locations, close to residential areas.

Bus services both inside and outside of peak times fail to offer a frequent level of service, particularly for those working within the ASEA

Though there are several services that serve the ASEA, they fail to offer frequent levels of services for those working within the area. Current bus services connect to Yate, Thornbury, North Fringe of Bristol, Cribbs Causeway, Lawrence Weston, Southmead, Henbury and Westbury-on-Trym, but these services run hourly on average at best, albeit with notable gaps in the timetable at certain times (particularly in the evening). In addition, the limited areas that they serve means that there are large parts of the region that do not have a direct and frequent bus to Severnside to access job opportunities, nor are there services for residents to connect from Severnside to other destinations in the region.

Typical arrival and departure times at work (for those working on site / mix of working at home on site) within Severnside indicates that whilst departure times are much more varied, arrival times are considerably more consistent with standard 9am-5pm working hours¹⁹. Despite this, bus services both inside and outside of peak

times fail to offer frequent levels of service to encourage public transport use.

There have, however, been several initiatives to trial employer funded bus services to the area with the support of SevernNet. The SevernNet bus service originated from the shuttle bus service that was introduced by South Gloucestershire Council via the Coastal Communities project. Some employers in Severnside have continued to provide their own funded bus services to pick up staff from across the region. The West of England Combined Authority has published a Bus Service Improvement Plan that sets out ambitions to improve bus infrastructure and services in partnership with bus operators that seeks to address issues like these, however these issues for Severnside have been prevented realistic movement to and from the area by bus for a long time.

Other bus services to and from Severnside offer a limited level of service

Cribbs Causeway represents the most substantial retail provision, and at present, there are limited public transport connections and those that exist can be unreliable as reported by residents. Services are limited to thrice weekly and Sunday only. This, together with the limited local retail, reduces opportunities for residents to travel to retail facilities by sustainable modes.

Bus infrastructure provision is not suitably located

Within the Severnside study area, 54% of all building structures (those within) are not within a 5-minute walk of bus services (approximately 400 metres) – the distance the majority of people

¹⁹ South Gloucestershire Council, *Travel to Work Data* (2021).

are willing to walk to access bus services²⁰. Bus infrastructure is often of poor quality, or poorly located.



An example of an inadequately located bus stop, taken on the B4055

Rail service provision in Severnside is limited

Both Severn Beach and Pilning are served by railway stations. Severn Beach station is located in the centre of the village, with Great Western Railways (GWR) offering a service to and from

Bristol Temple Meads, which calls at St Andrews Road, Avonmouth and Shirehampton, amongst others, and include services that run to and from the south of Bristol and on to Weston-super-Mare. GWR offer services before 9am and after 5pm on weekdays, predominantly two trains an hour before 9am. The service runs half hourly throughout the day from Bristol Temple Meads to Avonmouth, however this does not extend through to Severn Beach, which then has an hourly service throughout the day.

Pilning station has suffered consistent cuts to services through the station; at present, two trains a week (on Saturdays) in one direction (towards Filton Abbey Wood, past Patchway) serve the station. Despite the infrequency of services, the Pilning Station Group (who campaign for its regeneration²¹) report that the station's official usage figures have risen by 900%-plus (though this figure is likely to have been derived from an initial minimal tally).²²

Public transport network coverage is unlikely to encourage modal shift

Overall network coverage, frequency, reliability and speed of contemporary public transport connections are unlikely to encourage substantial modal shift.

Contemporary cycling provision is located predominantly west of the M49 and is of varying quality

National Cycle Network (NCN) route 41 begins in Severn Beach and eventually leads towards Lawrence Weston and onto

²⁰ Canepa (2007).

²¹ The Pilning Station Group submitted a bid to the Department for Transport for increased services and a new footbridge in June 2020. This bid was supported by Jack Lopresti MP (Filton and Bradley Stoke) but was ultimately unsuccessful.

²² [Pilning Station – #Footbridge4Pilning](#)

Avonmouth / Portbury. NCN route 4 begins in Redwick - in northernmost Severnside - and provides a link to North Bristol via Cribbs Causeway and Henbury. A section of the Avon Cycleway, which is a signposted route that covers parts of the countryside around the West of England, passes through the Severnside area through Hallen, Easter Compton and Pilning. These routes navigate around the circumference of the ASEA; and some of these sections are traffic-free routes of relatively high surface quality, albeit they suffer from a lack of lighting provision and / or active surveillance. As such, as realistic commuting routes there are considerable limitations. Moreover, there is no consistent provision of arterial cycling routes through the ASEA. Where cycle infrastructure exists, cars and other vehicles are a disruptive presence and are often parked along pavements.



An example of cars parked along footpaths within the ASEA

The cohesion and quality of cycling provision deteriorates east of the M49

These routes vary in quality and are often fragmented. Berwick Lane and the B4055 are observed to be particularly narrow at parts, with minimal lighting provision and notable blind spots. As such, discontinuous routes of varied quality pose a considerable challenge to the number of cycling journeys in the area.

Formal walking and wheeling²³ routes and bridleways are limited west of the M49, with little provision within the ASEA

Walking and wheeling routes are far more prevalent in the north, with numerous Public Right of Ways (PROW) present. Severn Beach offers several scenic walks along the Estuary – all of which are well sign-posted and present an attractive leisure / recreational opportunity to visitors / locals.

PROWs are abundant in eastern Severnside, albeit of varying quality and accessibility. Many of these routes navigate through open land and / or farmland, which increases opportunities to access the countryside, however the variable condition of PROWs mean that not all are to an accessible standard for all to use. Bridleways are also limited in the area.

There are issues with severance in Severnside

The presence of major roads and rail lines in the region pose major severance issues across the region where crossing, is either dangerous, not possible or the physical environment creates a perceived severance which will make individuals less likely to travel on foot or by bike. Crossing points exist on parts of the network, although legibility and wayfinding limitations reinforce the perception that connectivity on foot or by bike is not possible or realistic.

Community activity leads the way to promote and improve active travel options

In order to promote and improve active travel options across Severnside, SevernNet²⁴ founded the Severn Ride and Stride

project; the project has been running since February 2019. Severn Ride and Stride offers free support and resources, including travel planning and advice, customised maps of the area, bike hire (including e-bikes), cycling lessons and training, bike maintenance classes, an innovative Bike Hub offering repairs in Lawrence Weston (with funding support from Travelwest), ongoing path maintenance to support local authorities and improvements to signage / wayfinding.

Proposed infrastructure improvements within Severnside will further enhance connectivity to the national motorway network

Proposed infrastructural improvements within Severnside will further enhance connectivity to the national motorway network, with plans forthcoming to provide a new link road from the Central Park distribution park to junction 1 of the M49. It is understood that an approach has been agreed between South Gloucestershire Council and the Department for Transport and National Highways to help deliver of the link road, which will be delivered by South Gloucestershire Council. The new M49 junction has already been

²³ Wheelchairs, pushchairs, scooters.

²⁴ SevernNet are a not-for-profit enterprise run by, and working for, the benefit of local businesses and the community. SevernNet serves the Royal Portbury Dock, Avonmouth and Severnside areas.

completed, with the intention to improve access to Bristol Port and the ASEA and relieve congestion on the local road network.

Figure 2-5 - New link road - M49 J1



Source: OpenStreetMap contributors

Metrobus services will connect to the Severnside area

The West of England Joint Local Transport Plan 4 identifies the following schemes, proposed for development to be located within the Severnside study area or with the potential to influence travel behaviour within the area:

- Metrobus – Bristol City Centre to Severnside via the A403 and A4 Portway, connecting into existing metrobus infrastructure

in Central Bristol. The route would connect the logistics cluster at Severnside and Avonmouth with Bristol City Centre via the Portway Park & Ride site. It is considered to be one of the latter Metrobus extensions to be completed, circa 2036.

- Smart ticketing - WECA is looking at how ticketing can be simplified, giving people flexibility to move across different transport systems more easily.

Improvements to the existing rail service in Severnside are proposed

The Combined Authority is currently working in partnership with DfT, Bath and North East Somerset Council, Bristol City Council, North Somerset Council, South Gloucestershire Council and Network Rail to deliver new and more frequent rail services across the region as part of MetroWest Phase 1:

- Hourly services on the Severn Beach Line to Bristol Temple Meads facilitated by interventions to level crossings.
- Half hourly services from Avonmouth to Bristol Temple Meads to include the newly developed Portway station, to serve the adjacent Park & Ride.

The joint Network Rail and WECA 10 Year Rail Delivery Plan 2020 to 2030 identifies schemes that are to be delivered between 2030 to 2045:

- upgrading platform capacity at Severn Beach and re-signalling the Severn Beach Line; and,
- Enhancements to the Henbury Line – offering a half hourly service from Severn Beach to Yate via Bristol Parkway and/or linked half hourly service on the Portishead line. Infrastructure improvements would constitute a new north-facing chord for

the Severn Beach to Henbury Line and a new platform at Severn Beach.

Furthermore, the restoration of Pilning station is identified as a scheme that *could* come forward during the 10 Year Rail Delivery Plan.

There are active travel improvement schemes proposed

In Spring 2020, the Combined Authority ran a consultation on their Local Cycling and Walking Infrastructure Plan (LCWIP); it is intended to provide high quality infrastructure where cycling and walking are the preferred choice for short trips. Although none of the proposed walking, wheeling and cycling routes pass through the Severnside study area, some new infrastructure schemes have been proposed as part of future development. For instance, the proposal in the ASEA for the construction of a roadside facility comprising a petrol filling station, convenience store, drive thrus (McDonalds), new access, and associated work, includes a new cycle link to be provided through the site, as well as other walking, wheeling and cycling links to be delivered as part of recent developments.

Innovative transport solutions are to be trialled in Severnside

The West of England has funding under the Future Transport Zone programme to trial and develop innovative transport concepts that, if successful, could be adapted to areas like Severnside. These solutions include mobility hubs where multiple transport options are integrated with existing public transport offerings, including e-bike and e-scooter hire.

3. Issues and opportunities

3.1. Communities

Within Severnside, there is a **limited range of public amenities and services**, often of poor to reasonable quality, and these are not sufficient to adequately serve its communities. The existing range of public amenities and services are dispersed widely across the area, with few, if any, central points. There are limited civic / public spaces to accompany existing provision, reducing footfall and preventing public amenities and services from maximising their full potential.



A local convenience store and the surrounding area in Pilning

The substantial retail provision in Cribbs Causeway; however, has **limited active mode and public transport connections between Severnside and Cribbs Causeway**. This, together with the limited retail provision in Severnside itself, lends itself to a high level of car mode share in the region, particularly for retail.

The ASEA Ecology Mitigation and Flood Defence Project, despite focusing on protecting the ASEA employment area, will bring significant benefits of flood defence to existing communities in Severn Beach. However, there are **limited infrastructure proposals in the pipeline designed to serve the existing communities** in Severnside. Superfast broadband will enhance digital connectivity between Enterprise Areas in South Gloucestershire, including the ASEA, however the communities of Severnside may not benefit from the same provision.

Formal green infrastructure provision is limited within existing communities. Where there is, these spaces are highly valued by communities and offer a central point of focus for community activity. There is a significant allotment garden located in Severn Beach, as well as a children's play area and football pitches adjacent to the village hall; it is these shared community green spaces that are paramount in developing a sense of place within an area.

There is already an **imbalance between jobs and homes** in Severnside, that will increase with up to 12,000 jobs proposed in the ASEA and around 2,200 households in the Severnside area. This means that the majority of the workforce at ASEA travel in to the area from elsewhere.

The current transport and movement framework across Severnside has been built around **the car as the primary choice of movement**. This has led to poor public transport services to serve existing communities, reinforcing travel by private car as the

most attractive method of travel for those who have access. Where there is public transportation provision, the journey duration does not favour the use of public means instead of private car. In many cases the use of interchange is required and often it will include walking, which can increase the amount of effort needed to get to the desired destination.

The highway network is characterised by large junctions and roundabouts – facilitating the ease of movement for freight - which create severance between communities, isolate areas of green space, and reduce the amount of space available for development. The movement of freight is considered by local residents to contribute to the regular deterioration of local transport networks.

Furthermore, the **roads and rail lines themselves have created major points of severance** across the region, creating an environment which is often impenetrable by foot or by bike, inhibiting active mode modal shift. Where active mode routes are present, these routes are of varying quality, coherency and accessibility.

Communities in Severnside face **significant flood risk**. The existing coastal settlements in Severnside such as Severn Beach, Pilning and New Passage are entirely dependent on the presence of existing defences, and although they offer a level of protection for some existing residents, new flood defence schemes are not intended to protect new residential developments, which will be subject to sequential testing and feasibility work to understand the risk of flooding and the suitability for new development. Hallen and Pilning are both susceptible to the adverse impacts of climate change on surface water flooding.

COMMUNITIES - Emerging Opportunities

Development, investment and growth

Within Severnside, there is a significant opportunity to meet regional housing requirements in various locations, which would increase / lead to:

- improvements in local services and facilities
- the viability of public transport provision
- the funding and delivery of broader environmental improvement programmes
- new development that reinforces a strong local identity and sense of place.

In much of Severnside, sequential testing would be required to confirm the suitability of large parts of the area for further residential development. The release of Green Belt land may also be required.



Identity and sense of place

The Severnside area offers huge potential to further develop its sense of place, reflecting the strength of community that smaller settlements can foster, as well as the value of living besides a unique environmental ecosystem.



Green spaces and waterways

Innovative waterscapes / landscapes, as well as more broadly scoped flood risk strategies, could benefit the character of Severnside's communities. This would also benefit the natural environment, creating attractive settings which would be sympathetic to the area's context.

The area would benefit from a comprehensive strategy to guide any future programmes and initiatives. Any strategy should seek to incorporate existing open spaces and the green networks within the Green Belt and along the Severn estuary and shoreline. In doing so, the area's unique attributes could be enhanced, enabling the area to fully realise its potential.



Access and connectivity

There is a significant opportunity to enhance walking and cycling provision to and within Severnside's communities, building on and expanding existing networks. Enhancements to the frequency and integration of bus and rail services can make public transport an attractive and credible option for residents.



3.2. Natural environment and Green Belt

Sevenside benefits from a significant (non-formal) green and blue infrastructure provision. However, **the strategic connectivity between green and blue infrastructure could be significantly improved**. Green and blue corridors are often fragmented and disconnected from other fragments of protected landscape. The **accessibility is also limited**, whereby many of the access routes are of varying quality and require navigating through open land and / or farmland. There are opportunities to improve wayfinding through these areas to increase awareness of the network of corridors.



An example of inaccessible green space, taken on Over Lane

The potential **place-making function of green infrastructure is also not being maximised** in Sevenside. Upon initial inspection, large amounts of green and blue infrastructure can be identified across the study area. However, the proportion of green infrastructure that can be considered freely accessible for general recreational purposes (e.g. public parks not allocated as sport facilities) is much smaller and is not equally distributed across the area.

Furthermore, many of the green spaces in Sevenside have not been created with good urban design principles in mind. **Many spaces are located at the periphery of development**, are hard to reach by foot or bike and suffer from poor natural surveillance.

Constraints of the Green Belt **inhibits the amount of developable land** in Sevenside, so new development/regeneration coming forward will need to pass an exception test to enable growth in housing.

Sevenside is particularly **susceptible to the effects of climate change**. Climate change will need to be factored into any decisions that have long-term effects, like future infrastructure improvements. Green and blue infrastructure can serve to mitigate against climate change through sequestration, as well as increasing resilience to the effects of climate change such as increase frequency of extreme weather events such as flash flood and high temperatures. Green infrastructure can also be better incorporated with grey infrastructure such as cycle networks and buildings to reduce surface water run-off and to provide valuable shade in the urban area.

The **challenges of coastal change due to the changing climate presents challenges and tensions**. For example, there are observed challenges and tensions between protecting historic and

archaeological features (such as ridge and furrow in areas subject to flood risk and at risk from inundation) now for the short term or changing land management to improve resilience of the area for the longer term.

Moreover, much of Severnside is already prone to flooding in some locations and increasingly occurring adverse weather events will place **increasing pressure on waste-water facilities** with potentially wide-reaching impacts from flooding.



NATURAL ENVIRONMENT & GREEN BELT- Emerging Opportunities

Development, investment and growth

There is a significant opportunity to develop an ambitious programme that builds upon a unique 'active Green Belt area' that has started to emerge around its leisure and tourist attractions.

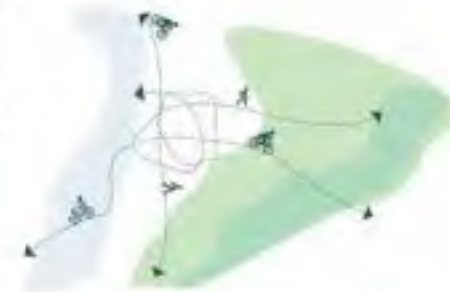
An area could be created that:

- Establishes new value and economic opportunity in the Green Belt
- Significantly improves and broadens access to the countryside
- Supports improved understanding and empathy for the natural environment
- Advances new approaches to education and learning
- Expands opportunity for leisure and recreation
- Supports investment in the Green Belt to support further enhancements to address water management, biodiversity and climate change.



Access and connectivity

In line with the ambition to improve access to and within the Green Belt, a comprehensive transport strategy to support public access will be required. Strategic connections could facilitate movement to and from the North Fringe of Bristol.



Identity and sense of place

Sevenside's natural environment and Green Belt land offers great potential to encourage further recreational and educational activities directly related to the contemporary environment, such as horse riding, eco farms, educational retreats and environmental retreats.



Green spaces and waterways

An innovative and forward-thinking programme can encourage creativity and innovation in developing compatible and coherent land uses. It is envisaged that such an approach would provide both the impetus and funding that could extend and enhance the wetland and woodland character of the area, as well as serving to improve biodiversity through the creation of new habitats.



3.3. Economy

Sevenside has the potential to play a key role in driving forward the four key priorities set out in the West of England's Local Industrial Strategy relating to cross-sectoral innovation and research, inclusive growth, adoption of new technologies and capitalising on the region's innovative strengths to deliver the infrastructure necessary for future growth. However, at present there are numerous factors inhibiting this and creating wider adverse impacts in the Sevenside area.

The **existing transport network is creating challenges in connecting people to jobs** within the region. The existing road network inhibits local opportunities and access to labour markets, for example in Lawrence Weston, due to the lack of direct and safe walking, wheeling and cycling routes. Employment opportunities are currently perceived to be easier to reach from outside the Sevenside area and Bristol conurbation using the Strategic Road Network.

Arterial routes within the area are limited and prone to deterioration. The A403 – the most direct route through Sevenside to Bristol – is the exclusive means of access to most of the employment areas, and is a long, winding route.

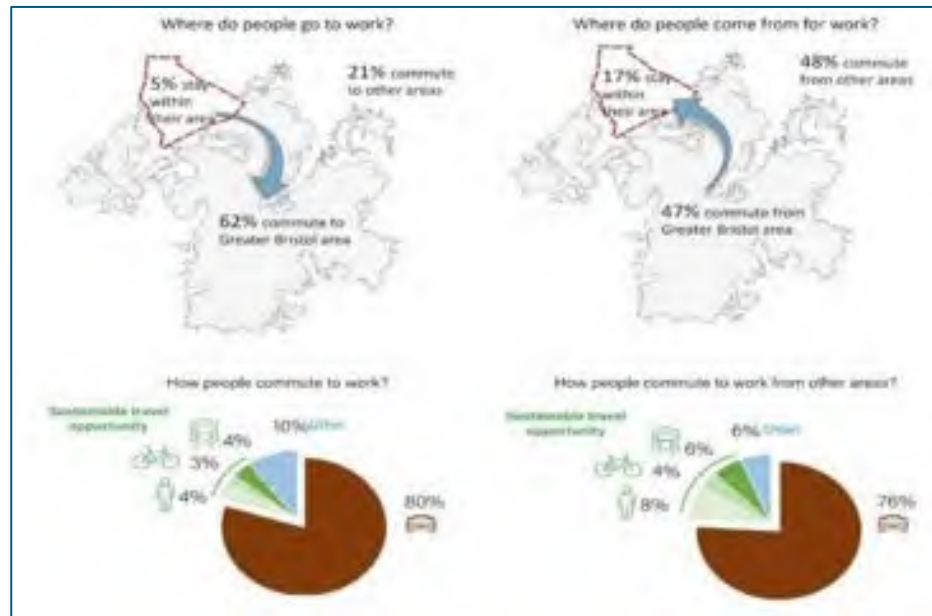
There are **limited active mode routes serving local employment centres**. The presence of major roads and rail lines in the region pose major severance issues across the region where crossing, is either dangerous, not possible or the physical environment creates a perceived severance which will make individuals less likely to travel on foot or by bike.

Severn Beach has a rail station that provides services connecting to parts of Bristol, however the station is located away from employment sites. There is **limited public transport provision**

that does not adequately serve existing employment locations. As noted above, the A403 is the most direct route through Sevenside to Bristol, but the physical character of Sevenside, in that it covers large areas of land, means that journey times are long and not direct to where people need to go, which inhibits the ability to create an efficient, viable bus service. The contemporary public transport provision fails to offer an attractive, direct service for local customers. Access to key employment opportunities in the west of the area is therefore hindered due to an overwhelming dominance of car access and little penetration by public transport.

The imbalance of employment uses in comparison to a small residential population has also contributed to **high levels of in-commuting**, with the private car the dominant mode of transport.

Figure 3-1 - Work commuting patterns



Source: Census (2011)

This environment has created market pressures which are **not attracting the levels of investment** needed to encourage economic growth which will drive forward new innovative businesses into the region which can help to drive forward sustainable growth.

The 1957/58 planning consents to the (then) ICI Chemical Works in the ASEA, which remains extant, have the potential to result in **unconstrained development and a lack of co-ordination with other parts of the area**, and to limit the ability of the local authorities to realise infrastructure improvements through the development control process. This has and will continue to create a fragmented and disjointed townscape. Moreover, unconstrained

development adjacent to the Severnside Estuary – an internationally important site – has the potential to harm its integrity without a sufficient and comprehensive mitigation strategy.

There are **limited amenities to serve the local workforce**, creating a somewhat transient atmosphere. A lack of uses that face the street, bringing activity and natural surveillance within the public realm may also enable or encourage anti-social activity. The open spaces around employment sites are not well linked or legible from the local community, therefore improved wayfinding can help to overcome this.

ECONOMY- Emerging Opportunities

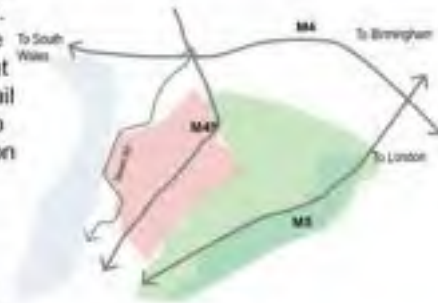
Development, investment and growth

The ASEA would benefit from a considered and structured approach to future development in order to realise its potential. Such an approach would serve to create a distinct identity and sense of place. This could for example, see the promotion of a coordinated approach to street frontages, the public realm and service access, and the development of a comprehensive green and blue SuDS strategy to add an attractive dimension to the area. In doing so, this would help the area to develop from its unique context and maximise its contribution to its unique environmental context.



Access and connectivity

Severnside has excellent strategic road connections and will benefit from the proposed connection to the M49. There is an opportunity to exploit the proximity of a significant employment base to Severn Beach and Pilning rail stations by exploring opportunities to improve rail and bus service provision as part of a wider review. As well as this, improvements to cycling and walking infrastructure would further benefit access and connectivity throughout Severnside.



Green spaces and waterways

A particularly valuable area of wetlands are sited within Severnside's employment core - the ASEA. There is therefore considerable potential for a sustainable blue-green network to be developed. A co-ordinated approach to green/blue infrastructure management and provision could provide opportunities for the environment, for local residents, and for the wealth of wildlife and associated habitats that are present. There is an opportunity to connect green/blue infrastructure strategically to other key employment centres - notably in the east of Severnside.



Identity and sense of place

A co-ordinated approach to future economic development would be of particular benefit to the ASEA in terms of establishing a distinct identity, giving confidence in the character and quality of future growth, and improving the location's appeal to employees. Such an approach would serve to enhance the area's appeal and attractiveness to high-density employment uses and more diverse job opportunities.



4. Stakeholder engagement

Stakeholder engagement has formed a fundamental part of the development of the Severnside masterplan, informing both the vision, option development, and validating the baseline analysis. Engagement has been undertaken at key stages throughout the project with local members, parish councils, community groups, technical stakeholders and representative of major organisations in Severnside.

An initial phase of stakeholder engagement was undertaken in early 2022. The aim of this initial engagement was to discuss strengths and opportunities for Severnside, based on evidence gathered through the baseline process with key stakeholders and to collect feedback (and any key information/data) to shape the masterplan vision.

This first phase of engagement was targeted, with key stakeholders identified and invited to attend an online introductory workshop. Four workshops were held for specific stakeholder groups:

- Officer workshop (internal workshop for South Gloucestershire Council officers across a number of disciplines).
- Members workshop (South Gloucestershire Council Members and Parish Councils).
- Technical stakeholders workshop (national and local technical stakeholders relevant to Severnside, including utility providers, business networks, public transport operators and statutory environmental bodies, such as the Environment Agency).
- Major organisations workshop (major employers in Severnside, including SevernNet).

- Community groups workshop (Pilning and Severn Beach Neighbourhood Plan Steering Group, local community & campaign groups, religious organisations and equalities groups).

The workshops provided an opportunity for stakeholders to ask questions and provide feedback in a live setting and feedback was also requested via email following the workshops. Follow up meetings were held with key stakeholder groups, including the Pilning and Severn Beach Neighbourhood Plan Steering Group and SevernNet, which provided an opportunity to discuss issues and opportunities in more detail.

We asked stakeholders what issues they think there are in relation to the infrastructure in Severnside and what opportunities they can identify to improve existing infrastructure provision. The feedback has been grouped into: communities; natural environment and Green Belt; and the economy. Where feedback has related to the movement to, through and between the three themes (or the areas which support/facilitate them), this has been grouped separately. Where feedback has not directly fallen into any of these categories (or indeed effects several of these areas), this has also been grouped separately. The key points which were raised by stakeholders are outlined below.

4.1. Communities

Housing targets are noted to be ambitious within South Gloucestershire and in Bristol. Emerging planning policy is considered to displace existing commercial and industrial uses from within urban areas of the region into Avonmouth and Severnside to a significant extent. Stakeholders note this is a major strategic matter.

Severnside has a high number of jobs, but **the level of housing does not match the number of jobs available**. Stakeholders note

that policies seek to locate housing closer to jobs to reduce travel, but there are not enough houses to provide for workforce who want to live close to where they work.

There is considered to be **a need for affordable, 2-3 bed houses with off-street parking and be zero carbon ready**. Some stakeholders feel that flooding should not be used as a barrier to build more homes in northern Severnside, where **considerable investment in flood defences has taken place**.

In terms of housing growth, those who live in villages explained that they want to **keep the rural feel of the villages**. Residents moved to these villages wanting a rural community. For other areas, people **want more services and facilities in Severn Beach and Pilning** and recognise that this will only come when there is more demand for them, so housing growth may be required.

Local and public amenities

Severn Beach Primary School and St Peters Primary School in Pilning have relatively small capacities that they are not filling, which stakeholders recognise that they need more pupils to justify any upgrades to older facilities. It was noted that Marlwood secondary school has been shrinking in size in recent years.

Stakeholders observed the fact there are **few local amenities and services**; there is no pub or fish and chip shop, and a single shop. A Tesco Metro or similar would be welcomed.

The community halls are not considered to be very well used. Communities want **more sports facilities and places to meet and socialise**.

Identity and sense of place

A common theme amongst stakeholders is the **desire to enhance the image of the area**, currently considered a constraint to attracting workers, and subsequently employers, to the area.

Moreover, a **desire to bring out the history of Severn Beach as a tourist destination** has been observed, particularly as Severn Beach as a resort will be 100 years old this year. Severnside is noted to be the area in which the clay for Cattybrook Bricks was found, which were used in the construction of many notable buildings across the region. However, the lack of car parking for visitors results in local streets being used to the frustration of local residents.

There needs to be a recognition that much of Severnside is an industrial area, but the **rural/coastal community identities should be maintained**. To foster greater community spirit, more facilities for socialising are needed.

4.2. Natural environment and Green Belt

Climate change and flood risk

It is considered important for adaptation to climate change and ecological richness to be part of the main objectives of the masterplan – in particular there **needs to be an awareness of sea level rises and natural environment designations**. Stakeholders, overall, are very keen to understand the considerations given to climate change and the **impact on flooding** in the area and consider this an important element to the development of any masterplan for Severnside. The Environment Agency as a statutory body stress the need for sequential testing of sites **to seek locations that are not within flood risk areas where other sites with lower risk of flooding are available as part of the Council's plan-making processes**. Further technical and feasibility work, including in relation to flood mitigation measures, should therefore provide evidence for both the statutory planning process and fine-tuning of the masterplan delivery objectives.

Green/blue infrastructure

The **importance of green infrastructure** within Severnside was raised by many stakeholders, particularly Parish Council members. Some stakeholders fear that aspirations to improve green and blue infrastructure in the industrial area may prove difficult (the time to do this may have passed), due to many warehouses that have been constructed as self-contained big box units.

It is noted that Pilning and Severn Beach Parish Council are seeking an extension of the Green Belt further south to **create a definite barrier between the village and industrial areas**.

Habitat creation is considered important, and opportunities to **facilitate greater habitat expansion / creation** are key. The opposite side of the River Severn in south Wales is observed to be an area that can be investigated for inspiration with wetlands.

Stakeholders observed that there is **lots of unsustainable land use**, resulting in poor nutrient levels in waterways.

4.3. Economy

Development within the ASEA

Many stakeholders raised that considerable thought is required as to **how the extant planning permission and associated section 106 agreement will align with any wider strategic objectives** for the area. The extant planning permission is considered as an inhibiting factor in the availability of relevant public transport and active travel choices. The extant permissions have hindered good quality and diverse, innovative development in the ASEA.

There are concerns that growth within the ASEA may encroach into residential areas.

Eco-tourism and other cultural destinations

There is significant **opportunity to encourage recreation tourism / eco-tourism within Severnside**. There are key green infrastructure and recreation opportunities (e.g. The Wave, Wild Place Project) to invest in nature reserve areas (eco-parks) growing green tourism/recreational offer and support flood resilience and nature recovery objectives.

4.4. Transport and movement

Highway infrastructure and demand

Severnside's strategic road connections are a key strength, particularly the benefits associated with the area's close proximity to the national motorway network and Port of Bristol. **Improvements to strategic linkages**, such as the new link road to junction 1 of the M49, are generally perceived as vital.

The **existing road network inhibits local opportunities** and access to labour markets. One particular comment of note revealed that it is easiest to reach the employment opportunities from outside the area using the SRN (Strategic Road Network) – with a number of staff in the area commuting from South Wales.

Arterial routes within the area are considered to be an issue. The A403 – the most direct route through Severnside to Bristol – is the exclusive means of access to the employment areas, and is a long, winding route that inhibits the ability to create an efficient, viable bus service. **The A403 serves as the only arterial route**, accompanied by a series of smaller, rural roads. The small, rural roads struggle to facilitate job related traffic. Moreover, there is concern that development around Severn Road leading towards Hallen will further **exacerbate transport issues on the local network** as Severn Road is particularly narrow and considered unsuitable for heavy traffic.

The B4055 is thought to becoming more trafficked due to The Wave and Wild Place Project. Traffic is perceived to be busy at all times of day and night through Easter Compton and Pilning due to the shift patterns at Severnside. The route has considerable traffic calming measures.

There is general **frustration over the incomplete M49 junction**.

Public transport

Overall, the **public transport network coverage is perceived as poor** in terms of frequency, reliability and journey times, preventing modal shift from the private vehicle. Improving public transport provision is of fundamental importance to stakeholders, to serve local residents and to open up the range of employment opportunities to labour forces in close proximity (e.g. Yate to Severnside is noted to be a difficult journey by public transport). The A403 is considered to be an issue, as detailed above. Bus services fundamentally struggle to be relevant because routes are 'tortuous'.

Bus services are noted to require substantial ongoing public funding in Severnside. Several stakeholders alluded to the notion that **travel demand may pose an issue and overall constraint** to the delivery of a viable public transport offering. Major employers e.g. Tesco and Warburtons self-fund public transport provision, reducing demand to run public bus services serving the area.

It is noted that those from South Wales **cannot get a train easily** to Severnside, as trains using the Severn Tunnel do not use the Severn Beach Line. The station at Severn Beach is noted to be a long walk from many of the industrial sites, so is **discouraging to use**, particularly in winter.

Freight

The importance of freight, and the **associated ease of movement for freight**, was noted throughout the engagement process.

However, key challenges were identified in order to deliver this, in particular how passenger and freight provision can be accommodated without compromising the operation of the port.

Suggestions for transport improvements from stakeholders

The importance of delivering **efficient transport infrastructure** was stressed throughout the engagement process and is considered by stakeholders to provide the **fundamental structure upon which new opportunities can emerge**. The masterplan will need to consider Portbury, Avonmouth and Severnside area holistically, as transport issues cross boundaries.

Specific transport infrastructure suggestions were made by stakeholders, each of which has been considered during the intervention identification process and subject to further investigation during the masterplan development. Infrastructure suggestions include:

- Improved strategic links to connect the motorway network to the ASEA to divert heavy traffic away from existing communities and enable improved sustainable travel connections.
- Improvements to rail services at Severn Beach and Pilning and other opportunities to facilitate greater service provision.
- Metrobus or a minibus extension to the Wild Place from the Mall in Cribbs Causeway, as well as bus stop provision at the Wild Place.
- Coherent walking and cycling infrastructure routes between key destinations within the area.
- A car park to serve Severn Beach station.
- Improve sustainable travel links to existing rail stations, including between key employment destinations.
- Last mile provision from Severn Beach station

4.5. Other feedback







Utilities

Innovation and consideration are required in regard to utilities infrastructure. It is also considered important to reduce the dependency on numerous private effluent connections within the area, thereby potentially providing the opportunity to develop a sewerage scheme to serve existing and new commercial development connecting to the water recycling centre in Avonmouth.

In regard to **energy and heat distribution**, projects in Dutch port areas were raised as exemplars to further investigate.

5. Summary of issues and opportunities

Considering the information gathered for the baseline and enhanced through the stakeholder engagement, here is a summary of the main issues and opportunities identified that the masterplan seeks to address, that cut across each of the distinctive land uses in Severnside:

	Communities	Natural environment and Green Belt	Economy
Connectivity & movement A need to improve connections to, through and around Severnside by sustainable modes and ensure development of appropriate infrastructure to enable efficient movement.			
Potential for growth A need to support planned growth of the ASEA as a regional employment hub, balance the ratio of jobs to homes to reduce the need to travel and maximise the potential of the natural environment.			

Identity & place

A need to recognise and promote Severnside's uniqueness and enhance the uniqueness to attract people to live, work and visit.



Nature & wellbeing

A need to integrate and connect green spaces to provide wildlife corridors and increase access to nature.



Environment & resilience

A need to consider and increase resilience to the impact of climate change and enhance the unique environments and habitats in Severnside.



6. Developing a vision for Severnside

The development of the vision for the Severnside masterplan has followed an iterative process. The vision was initially developed by drawing together key themes from existing work, notably South Gloucestershire Council's adopted Core Strategy and Local Plan 2020 issues and approaches report and the emerging themes identified in the baseline report. The vision has been subsequently refined through the engagement process, wherein stakeholders have been involved in workshops to refine a vision for the area which addresses the key challenges across Severnside and aligns with regional and local priorities.

The vision is underpinned by a number of distinct objectives, identified through the masterplan development process. These objectives are fundamental to support the delivery of the aspirational vision and will ensure that the primary challenges associated with sustainable development of carbon net-zero and climate resilience, equality and diversity and economic growth are met.

6.1. A vision for Severnside

"To recognise Severnside's unique communities and internationally important status, both environmentally and economically to attract and focus new investment."

6.2. Objectives

The aspirational vision for Severnside has been considered alongside key challenges which must be addressed when planning for sustainable development as outlined in the National Planning Policy Framework (NPPF).

Eight distinct objectives have been identified which this masterplan will aim to address through an infrastructure-led strategy to deliver a vision for Severnside.

All objectives are underpinned by primary challenges associated with sustainable development as outlined in the NPPF of carbon net-zero and climate resilience, equality and diversity, through better connectivity to work, services and the natural environment that opens opportunities from which all people in society can benefit, and economic growth.



Supporting existing communities

Meeting the challenge of delivering the local housing need and identifying a suitable amount of new housing to come forward in the Severnside area that serves the needs of the local community including considering providing new homes to balance job growth. Providing a range of home tenures, types and sizes in sustainable locations. Identifying key infrastructure, services and facilities to support new and existing communities.

Supporting regional employment opportunities

Enabling Severnside to continue to be a major economic driver in the South West, serving to attract inward investment, drive innovation and a collaborative economy. Identifying the requisite infrastructure to continue to maintain and re-shape its role as a major focus for employment, fostering an inclusive environment for key sectors which are at the heart of the UK's economic future, including advanced engineering, green and environmental technologies, tidal power and transport and logistics.

Improving access and movement

Catalysing the development of a fully integrated, convenient, safe, attractive, accessible for all, sustainable transport network with priority given to public transport and active travel. Facilitating all modes to and through Severnside via appropriate and suitable highway infrastructure whilst maintaining access for local communities. Focusing a place-based approach to net zero transport infrastructure improvements with solutions that create better places and healthier, happier, more resilient communities.

Improving the purpose of and recreational opportunities of blue and green infrastructure

Identifying opportunities to deliver multi-benefit green and blue infrastructure aligned with the South Gloucestershire Green Infrastructure Strategy. Putting green and blue infrastructure at the heart of placemaking due to its potential to improve local quality. Mitigating against the adverse impacts of climate change on society and offsetting carbon. Improving the accessibility and quality of existing GI/BI within Severnside through strategic corridors and linkages to key destinations.

Protecting and enhancing the internationally important natural environment and habitats and responding to the nature emergency

Enabling thriving communities with a clean and biodiverse environment, where natural assets and historic assets are protected, and natural resources are used prudently. Preserving and enhancing natural assets and existing green space to support protected species that inhabit Severnside and to encourage greater species diversity through effective habitat management. Achieving a sufficient and comprehensive mitigation strategy for the Severn Estuary, enabling any development to proceed without harm to the integrity of the protected area.

Enhancing the identity and sense of place

Strengthening and preserving the distinctive identities and heritage of the existing communities and neighbourhoods. Improving civic and intimate space to evoke a shared sense of place and facilitate interaction.

Creating resilience against the impacts of climate change

Guiding infrastructure improvements to create resilience against the impacts of climate change. Strengthening and enhancing existing flood defence schemes and supporting new flood mitigation measures to better protect existing infrastructure/communities and enhance opportunities for development. Investing in future energy supply networks to consider where our energy will come from as we switch to sustainable sources. Ensuring that the infrastructure we put in place today to tackle water supply, waste-water management, energy supply and digital connectivity is future proofed.

Contributing to South Gloucestershire Council's 2030 net zero carbon emissions target

Contributing to achieve 'net zero carbon' by 2030 to match Local Political declarations and by 2050 to match that required by Central Government. Harnessing innovative transport solutions that reduce car dependency and embracing green and environmental technologies. Expanding the existing / growing renewable and low and zero energy technologies, and adopting smart technology to meet climate change challenges initiated, i.e., water and energy consumption.

7. Achieving an ambitious vision for Severnside

7.1. Assessing options to achieve the vision

To achieve the vision, meet the objectives and respond to the feedback from the community and stakeholders, ambitious steps must be taken. A holistic vision that spans across various functions requires a step change in infrastructure provision which will enable Severnside to thrive.

Throughout the masterplan the findings have been presented for three distinctive areas: **communities, the natural environment and Green Belt and the economy** and differing levels of growth and intervention have been assessed for each of these. These are:

- Continue with planned development with minimal intervention
- Small to medium scale growth with associated mitigation measures
- A level of ²⁵ growth that supports associated infrastructure interventions

A blend of these options has been considered most appropriate to meet masterplan and wider policy objectives and address the needs of Severnside.

7.2. Strategy and rationale to achieve the vision for each area

Communities

Over the long term, future housing growth in Severnside will help rebalance homes and jobs. It will create **demand and support viability for improved infrastructure, local services and facilities**. Future housing growth and improved infrastructure will also create an area that is more **self-contained, sustainable, and resilient**.

This will have wider benefits, not only for the existing community, but also will **improve infrastructure for employees and visitors travelling into Severnside**. Housing growth in Severnside will locate **more homes closer to jobs**, reducing the distance required to travel, giving greater opportunity for sustainable travel and providing a **better balance of homes and jobs across the region**. Housing growth must be sensitive to the character of the existing communities, whilst also providing much needed interventions for a more self-contained, sustainable, and resilient community. Development should be **supported by and planned in collaboration with the local community**.

Considerations must be given to the location of housing growth, given the **levels of flood risk** in parts of Severnside. Further investigatory work will be required to assess potential flood mitigation.

Natural environment and Green Belt

Severnside has a rich landscape, and there are several national and international statutory environmental designations which contribute to its natural environment and make a major

²⁵ The scale of development will be dependent on feasibility studies to determine what is possible given local constraints, including flood risk

contribution to the national and regional character. The green and open spaces present many opportunities to **enhance the network of green spaces** throughout Severnside for local residents and employees and has the potential to attract many visitors. There is great potential to improve the quality of the natural environment, **improving links through the Avonmouth Severnside Enterprise Area**, which is an area generally perceived to have poor quality green and open spaces due to the industrial characteristics. There is also opportunity to **enhance and manage the unique estuary environment** to create and protect habitats and improve conservation and resilience in Severnside.

Maximising the opportunity to enhance the natural environment and Green Belt with appropriate uses will **generate sufficient income and demand to help manage the natural environment**. Green spaces and watercourses could be managed to ensure continuous provision without interruption that could arise if growth in the area continues without direction from this masterplan. Maximising the opportunity to enhance the natural environment would provide justification and increase the **deliverability of improved connectivity** to communities in the wider Bristol area and would enable leisure experiences like the Wave and Wild Place Project to become an even **greater cultural asset**. In doing so, other conservation businesses would be attracted the area and the 'managed' natural environment becomes self-perpetuating so that the area **benefits from green spaces and water courses**.

Economy

Severnside has the potential to play a key role in driving forward priorities set out in the West of England's Local Industrial Strategy, given its strategic location with access to the strategic road network and the Port of Bristol. The Avonmouth Severnside Enterprise Area

is identified as a regional employment hub that is set to grow to incorporate up to 12,000 new jobs by 2026. There are existing planning consents across much of the area and space is allocated to accommodate much of this growth. The masterplan strategy seeks to densify jobs, to meet and potentially increase the number of jobs created and attract a diversification of employment types within the area. Increasing the density of jobs will require a diversification in employment types in addition to the logistics and distribution uses, **attracting more specialised employment types**. Emerging and adopted local and regional policies express a desire to build on the existing strengths of the area and there is a recognition of a need to improve accessibility and connectivity to achieve the ambition. **Densifying jobs will help justify infrastructure improvements**. An array of policies dictate that land supply for logistics and distribution uses is severely limited in other parts of the West of England, and **Severnside provides a suitable location** for these uses.

A desire to explore the potential of Severnside as a **District Heating Network (DHN)**, where heat is generated in a centralised location and distributed through insulated pipes to homes and businesses, is evident within local and regional policy, and this masterplan seeks to explore this. The **renewable energy sector could grow** and tie in with existing and densified development and a DHN in Severnside can cater for the needs of the growth of

employment (as well as other growth), whilst also helping to **meet climate resilience and carbon net zero objectives**.

The overarching strategy to deliver infrastructure improvements to address the issues and opportunities is:

Communities

Enable growth that contributes towards meeting local housing need, is close to jobs and creates wider demand and viability for improved local services and facilities and helps deliver key infrastructure.



Natural environment and Green Belt

Maximise the opportunity to enhance the unique estuary environment and improve green space networks to generate demand and income for better management, improve green links and enable conservation-based industry to become an asset.



Economy

Build upon the opportunity of existing growth in the Avonmouth Severnside Enterprise Area to continue the strengths as a industrial location and to densify jobs and diversify employment types in planned area to create demand to invest infrastructure to improve connectivity and attract more specialised jobs.



7.3. Integrating the strategy into a coherent masterplan

The strategy of the masterplan has set out the intention for each of the distinctive areas of communities, natural environment and Green Belt and economy. Here is how the strategy for the distinct areas can bring collective benefits to meet the objectives. This is followed by a concept image of the areas in Severnside to be investigated for each of these distinctive areas and how they could be developed:

Strategy for the distinct areas

Communities

Enable growth that contributes towards meeting local housing needs, is close to jobs and creates wider demand and viability for improved local services and facilities and helps deliver key infrastructure.



Natural environment and Green Belt

Maximise the opportunity to enhance the unique estuary environment and improve green space networks to generate demand and income for better management, improve green links and enable conservation-based industry to become an asset.



Economy

Build upon the opportunity of existing growth in the Avonmouth Severnside Enterprise Area to continue the strengths as an industrial location and to densify jobs and diversify employment types in planned area to create demand to invest in infrastructure to improve connectivity and attract more specialised jobs.



This strategy for the different areas brings collective benefits:

- Creates more demand and viability for improved facilities to benefit communities, employees and visitors
- Reduces inequalities, creating inclusive economies with access to facilities that support social cohesion, health and wellbeing
- Enhances green spaces and manages watercourses to provide habitats, flood management and attractive areas for local communities and visitors to enjoy
- Creates demand for improved connectivity to, through and around Severnside by sustainable modes
- Enhances the profile of Severnside in the region
- Enables Severnside to become a sustainable, self-contained settlement to live, work and visit
- Enables infrastructure to give greater resilience for existing and future communities

These meet all of the masterplan objectives.

Figure 7-1 - Locations to be investigated for the distinct areas



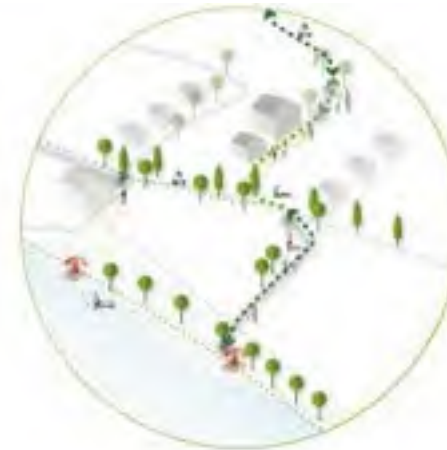
Figure 7-2 – Illustration of interventions to address the issues and maximise the opportunities identified in the masterplan



Improved tree planting and greening of streets to enhance underutilised open space



Improved accessibility to transport hub



Linking existing uses via pedestrian and cycle link through local centre to strengthen connections and enhance sense of community



New and improved footpaths connecting existing amenity spaces to enable sustainable movement

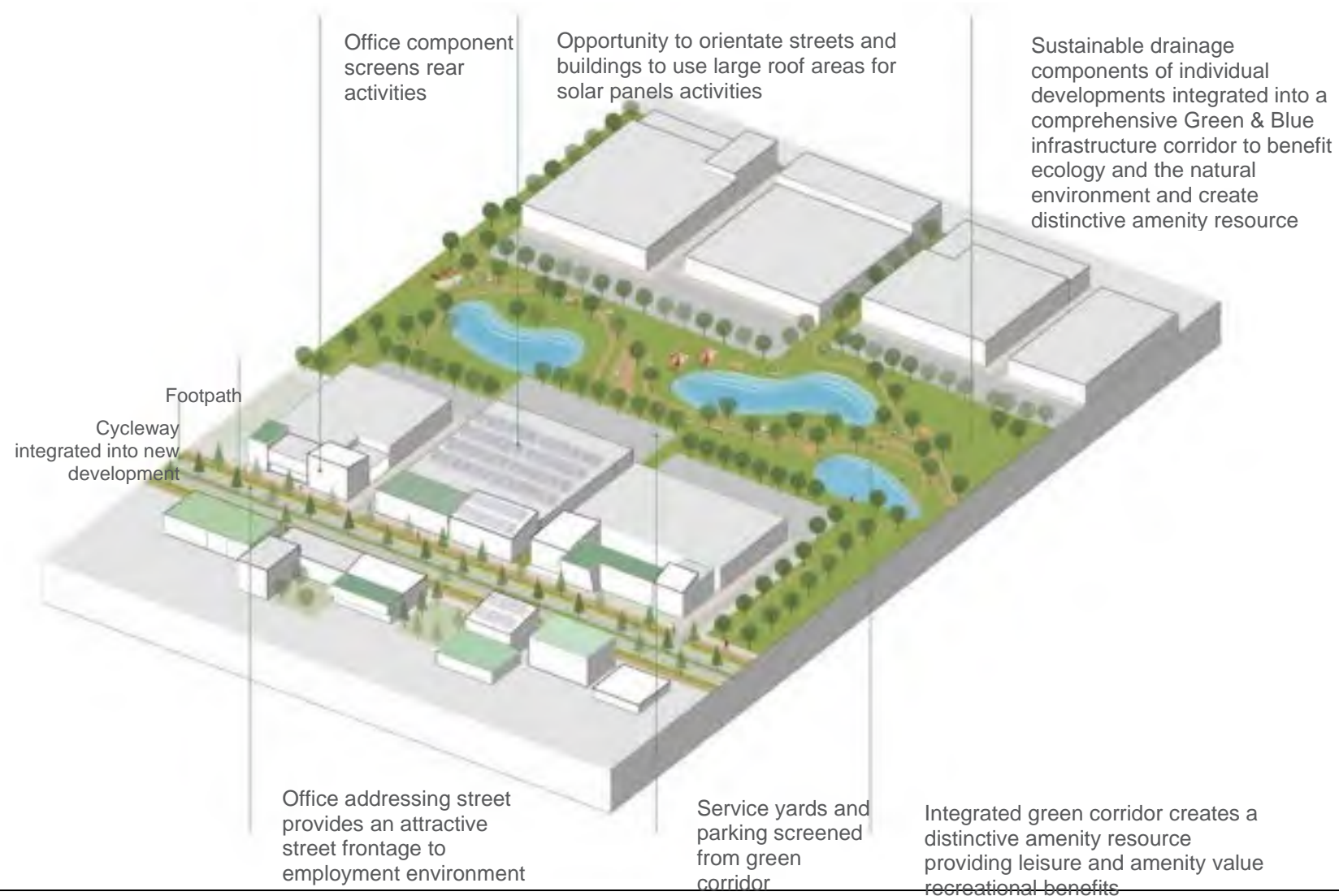


Enhanced leisure and tourist accessibility

Figure 7-3 - Illustration of how recreational and leisure activities could be developed within the natural environment and Green Belt



Figure 7-4 -Illustration of how future development in the Enterprise Zone could be planned to create an attractive street front employment environment. Illustration also shows how individual developments contribute to a comprehensive green space and waterways network



7.4. Interventions to achieve the vision

There has been significant investment in infrastructure in Severnside in recent years but gaps remain that have, to date, proved difficult to resolve. There are also limitations that reduce the opportunity to improve infrastructure through the planning process on sites that have extant planning consents within the Avonmouth Severnside Enterprise Area. This masterplan presents an ambition for growth to justify the levels of investment to address the issues and opportunities that span across communities, the natural environment and Green Belt and the economy. Mechanisms for funding and delivery are presented in the *Delivering the vision* section that follows.

The identification and refinement of opportunities to improve infrastructure has evolved through the development of the masterplan. Interventions were identified through a range of sources, including:

- Improvements identified in previous work
- Improvements identified in adopted and emerging policy and strategy (national, regional and local)
- Improvements suggested by stakeholders
- New improvements identified by consultants Atkins and Avison Young's experts to address identified problems or opportunities for enhancements

Interventions have been subsequently assessed against level of impact, cost, deliverability, acceptability, timescales and phasing. The interventions proposed are to present the principles of interventions and further feasibility work will be required to establish the detail of schemes. Below are concept drawings and a table containing the details of the recommended interventions to enable growth to achieve the vision.

Figure 7-5 – Concept of transport Interventions

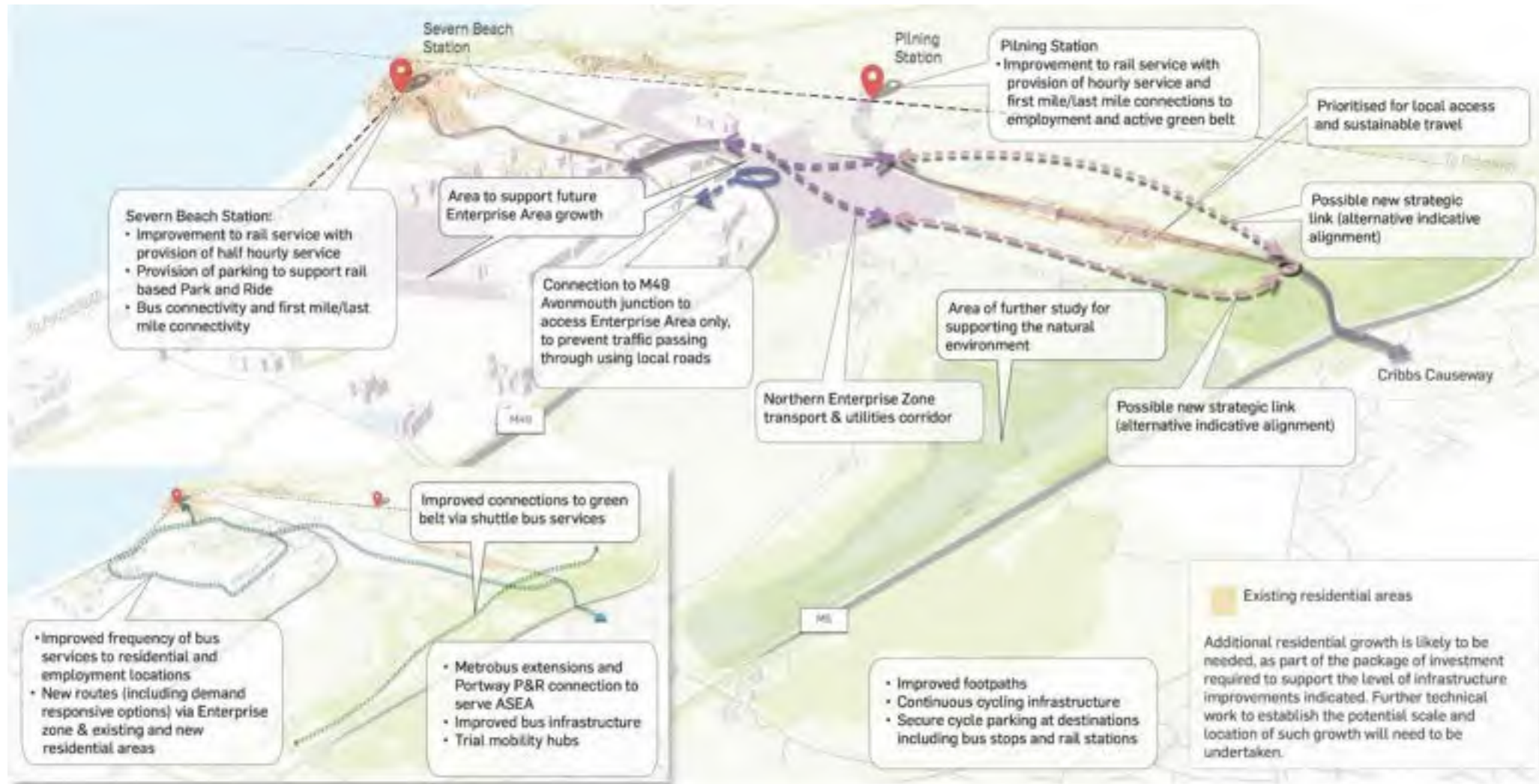
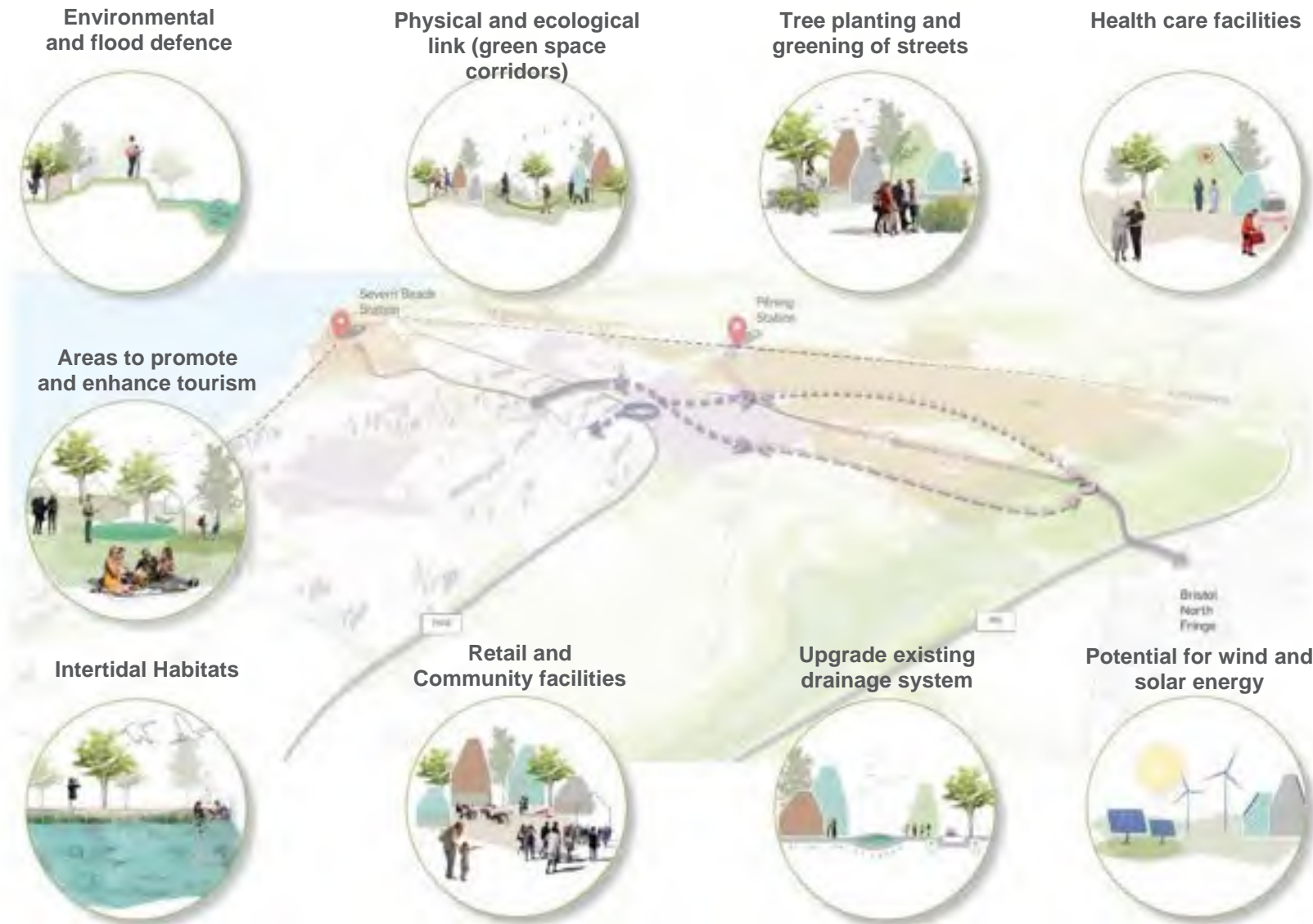


Figure 7-6 - Concept of wider interventions



	Interventions	Rationale
Active modes	New and improved footpaths and bridleways with improved lighting.	Support sustainable modes of travel, such as walking, wheeling and cycling and improve access to Enterprise Area, Severn Beach and Pilning railway stations, existing communities and green belt resource. Also to consider provision and improvements to walking, wheeling and cycling routes between Pilning and Severn Beach stations to improve flexibility.
	Continuous cycle infrastructure ²⁶ along all major routes to connect to key destinations within and beyond Severnside.	Protect and enhance connectivity to Enterprise Area, residential areas and the active green belt from within and beyond Severnside e.g. Cribbs Causeway, Avonmouth and other parts of the north fringe of Bristol, including connecting to transport hubs as part of longer journeys.
	Provide secure cycle parking for residents, employees and visitors at key destinations, including bus stops and rail stations.	To ensure adequate facilities to encourage people to cycle to and around Severnside, including as part of longer journeys when combined with bus services or rail travel.
Bus	Improved frequency and reliability of service to residential and employment locations.	Improve accessibility into the Enterprise Area, 'active' green belt and to services, facilities, and employment beyond study area to benefit residential community.
	New routes (including demand responsive options) via Enterprise Area and existing and new residential areas.	
	metrobus extensions to serve the ASEA, including from Bristol and the north fringe of Bristol.	

²⁶ To LTN/120 standard

	Investigate the use of the Portway Park and Ride for services to Avonmouth Severnside Enterprise Area.	
	Improve bus infrastructure , including waiting areas and travel information.	
	Shuttle bus services to connect to visitor attractions and provide links to the unique natural environment.	Improve accessibility into 'active' green belt.
Rail	<p>Severn Beach Station:</p> <ul style="list-style-type: none"> Improvement to rail services as part of MetroWest Phase 1 project²⁷ to increase train frequencies on the Severn Beach line Provision of parking to support rail based park and ride Bus connectivity and connections for the first and last mile to/from station 	<p>Improve accessibility into enterprise area, services, facilities, and employment beyond study area to benefit residential community.</p> <p>Residential demand supports viability of rail service improvement.</p>
	<p>Pilning Station</p> <ul style="list-style-type: none"> Station improvements are required to enable access to improved services, which should include an overbridge, and to improve waiting facilities Improved rail services and connections for the first and last mile to/from station 	<p>To improve accessibility by rail and last mile connectivity to/from employment and active green belt and residential areas.</p>
Integrated transport modes	Trial the use of mobility hubs²⁸ to integrate transport options at bus stops and rail stations to enable first/last mile connections, including e-bikes and e-scooters.	<p>Improve accessibility into Enterprise Area, services, facilities, and employment beyond study area to benefit residential community.</p> <p>Trial new approaches that seek to integrate existing transport options for seamless journey interchanges</p>

²⁷ [MetroWest Phase 1](#)

²⁸ [Mobility Hubs - West of England Combined Authority \(westofengland-ca.gov.uk\)](#)

		to extend the catchment of existing public transport infrastructure.
M49 connection	Highway connection to M49 Avonmouth junction from Avonmouth Severnside Enterprise Area	<p>Protects and enhances local communities. Includes bus, walking, wheeling and cycling access connecting to existing and new development.</p> <p>Need for investigation into lorry lay-over facilities as part of this intervention.</p> <p>This is to be delivered by South Gloucestershire Council.</p>
Strategic transport link	New strategic transport link connecting from Avonmouth Severnside Enterprise Area to M5 Cribbs Causeway	<p>Protects and enhances local communities. Provides a new link to employment, active green belt and growth areas to prevent unsuitable through traffic accessing local roads. This will open opportunities to improve local access roads for sustainable travel.</p> <p>Supports prioritising active modes and public transport through existing settlements.</p>
Local street improvements	Investigate the development of schemes that prioritise safe, sustainable and local access over traffic passing through in existing and new residential areas, known as liveable neighbourhood concepts	Seeks to reduce traffic destined for other destinations passing through residential areas to improve safety, including to ensure suitable speeds for local roads, improve sense of place and encourage active travel for local trips in local communities.
Nature and access to open & green space	Series of small-scale interventions to create physical and ecological links between environmental assets. develop the tourism potential of the area , e.g. observation and interpretation areas.	Benefit recreational and leisure use by improving access and creating green connections between existing and new open space and environmental assets with ecological connectivity.
	Provision of shared use green spaces to form integral hubs for social interactions within local communities.	

	Tree planting and providing more greenery along streets across the area.	Improve the quality of the environment for residents and visitors to the area as well as providing benefits for climate mitigation and resilience.
Retail and community	Provision of new local retail and community facilities .	This would be facilitated through residential growth and could include public or privately-owned facilities and services, such as gyms, food and beverage etc. Also by seeking to improve access to community farms and orchards provides additional sources for local food options.
	Enhance existing community facilities .	Strengthen the position of local schools and community buildings in the area, allowing them to serve as 'hubs' for neighbourhood communities.
Flood defence and other feasibility work	Carry out feasibility work on a variety of aspects, including to establish the potential and possible locations for housing and other growth opportunities	Upgrades to the existing flood defences are being facilitated through the Avonmouth Severnside Enterprise Area Ecology Mitigation and Flood Defence Project, which aims to protect the ASEA to enable development. Whilst the project will also provide protection for some coastal communities, the scheme is not intended to protect potential new residential developments. This reduces the risk of flooding in the study area, but the designation of the Flood Zone 3 area may not change. Further feasibility work to investigate flood defence requirements when looking at the suitability of sites for potential new housing growth.
	Integrate environmental and flood defence infrastructure into existing communities, through green spaces and nature-based drainage systems for rainwater management.	Accommodate opportunities for multi-dimensional flood defences that benefit environment, improved walking, wheeling and cycling routes, including bridleways and leisure opportunities. This would serve to protect and enhance local communities.
	In partnership with key stakeholders, investigate the potential of intertidal habitats in mitigating the	

	impacts of climate change, i.e. to provide efficient and cost-effective solutions to help protect communities from coastal erosion, storms and flooding.	
Wastewater & drainage system	Upgrade existing drainage system.	To mitigate risk of flooding from rivers and to ensure that the system can operate functionally and without adverse impacts on the wider community with additional growth/development.
Power Supply	Upgrade power capacity in the Enterprise Area.	To meet increasing power requirements of large-scale logistics and industrial users, enabling full business functionality.
	Investigate the potential for wind energy and solar photovoltaic (PV) schemes.	To build on existing the council's studies, and to ensure opportunities to identify and deliver different renewable energy resources in Severnside are pursued. This will help to ensure alignment with local and national 'net zero carbon' targets.
Digital connectivity	Provision of digital infrastructure , including the roll-out of superfast broadband.	To support the Enterprise Area in line with realigned employment sector ambition (higher density and higher value jobs).
Smart technology	Provision of appropriate environmental smart technology.	Initiate the adoption of smart technology to meet climate change challenges, i.e., water and energy consumption.

7.5. Policy and partnership interventions

As mentioned, significant gaps in infrastructure remain that have, to date, proved difficult to fill from public funding. This masterplan provides the basis for longer term interventions, policies and partnerships to be made to enable collaborative working across the Severnside community to achieve the vision.

In addition to the infrastructure interventions tabled, there are wider interventions that should be progressed. This strategic masterplan will pave the way for more detailed work to begin.

7.6. Policies, strategies and preparatory work

To enable housing growth in Severnside, **new feasibility work** on flood defence requirements will need to be prepared. Upgrades to the existing flood defences are being facilitated through the Avonmouth Severnside Enterprise Area (ASEA) Ecology Mitigation and Flood Defence Project, which aims to protect the ASEA to enable development. Whilst the project will also provide protection for some coastal communities, the scheme is not intended to protect new residential developments. This project reduces the risk of flooding in the study area, but the designation of the Flood Zone 3 area may not change. Further feasibility work to investigate flood defence requirements when looking at the suitability of sites for potential new housing growth will be required to investigate the wider Severnside area.

Detailed strategies to investigate the delivery of the masterplan may include closer investigation of the network of **green spaces and waterways** to guide all new development to ensure the best outcome (rather than a piecemeal approach). In addition, further investigation will be required for **maximising opportunities in the natural environment and Green Belt**. This will underpin ambition, structure delivery, promote inward investment and to assess site

specific infrastructure to support existing or new eco-tourism assets. Severnside's **cultural heritage** could also be investigated for further investment, driving community and visitor awareness, improve legibility and engagement to reaffirm the importance of heritage assets in the area.

Mechanisms to **influence existing planning consents** through a Supplementary Planning Document and/or design code could be investigated. This will support development of a distinctive identity and create a desirable employment environment. It can also support delivery of a green spaces and waterways strategy and facilitate environmental ambition, give structure to delivery and promote inward investment.

7.7. Working in partnership

There is a strong community with an interest in Severnside made up of residents, businesses and stakeholders. This masterplan intends for the community to support the ambition and help to work towards it via **community engagement initiatives and events**. This can include promoting employment opportunities and providing education and training courses. Working with local universities and further education colleges to design programmes can increase the skills base for priority sectors such as green technologies to serve the region and support realigned employment sector ambition (higher density and higher value jobs). These initiatives can also help to serve local communities to address 'digital divide'. Working with Invest Bristol and Bath can target investment and relocation strategy to encourage local industry and increase the profile of Severnside as a nationally significant employment area for logistics, green technology and advanced manufacturing.

Community initiatives to help people travel to and through Severnside by sustainable modes of transport can be investigated

by the community. This can include **engagement programmes** to encourage modal shift to sustainable modes, including encouraging the use of electric bikes to make longer trips and cycling up hills more comfortable. Partnerships can also be developed within the community to explore **shared mobility options** such as car clubs, bike and ride sharing to improve awareness of accessibility around Severnside as well as services, facilities and employment beyond the area.

As mentioned, a strategy for **green spaces and waterways** is recommended to help to protect and enhance Severnside's unique natural environment and there are partnerships that could be built upon developed to enable this to develop. Working in partnership with key stakeholders and community-led organisations can **integrate or build on green and blue infrastructure projects**, such as the creation/expansion of parkland and wetlands to achieve greater continuity between land and water and establish connections between the natural environment. Establishing partnerships with key stakeholders presents opportunities to collectively seek funding, achieve mutually beneficial outcomes and strengthens the ability to promote green/blue infrastructure as a leisure/recreational asset.

There is a need to establish partnerships with a range of stakeholders to **develop a greater collective knowledge and understanding of the wealth of environmental assets** within the area, **including the estuary**. The Severn estuary system is a great source of natural, economic and cultural wealth for the west of Britain and an integrated management approach that includes all interests is needed. Partnerships of key stakeholders need to examine and adapt existing approaches to ensure stronger, inclusive 'whole estuary' approach that is fit for delivering a restored and sustainable estuary.

8. Delivering and funding the vision

To deliver the masterplan vision, consideration must be given to how the required infrastructure is delivered and provide a plan for investment and mechanisms for funding. Presented here is a high-level assessment of the benefits of the interventions. This will inform the preparation of future projects and business cases for funding, and the rationale for public sector intervention to deliver the masterplan.

This section will be reviewed and re-shaped over the life of the masterplan and will take account of prevailing policies, funding opportunities and market and economic conditions.

8.1. Immediate intervention priorities

There is merit in progressing some immediate interventions, which have been identified in the previous sections as having short term timescales. This will set the tone and can act as a catalyst for the longer-term interventions and help to gain stakeholder trust and support.

Many immediate priorities are likely to be policy, partnership and promotion based interventions as opposed to heavy infrastructure projects given the low cost and short timescale. However, they will demonstrate that the local authority and its partners are intent on implementing the masterplan.

8.2. Longer term interventions

There is an opportunity to build on current dialogue and stakeholder relationships across key businesses, private sector infrastructure providers, landowners and community infrastructure providers to help plan for and drive forward the masterplan vision.

Given the diversity of the three areas of the masterplan (communities, natural environment and Green Belt, economy) and the potential for change, there is a need to develop a pipeline of interventions to ensure sustained delivery of infrastructure and to provide the right infrastructure at the right time. This will ensure that as new development comes forward, people continue to have access to necessary education, employment, and healthcare services as well as ensuring there is sufficient provision of green space and sufficient capacity in the transport and utilities networks to support increased demand.

Creating future-proofed utilities networks will be important to:

- Enable the roll-out of electric vehicles through the provision of green electricity
- Enable home-working and encouraging inward investment from research and development and advance engineering sectors through the provision of high performing digital networks
- Keep carbon emissions down.

The phasing of transport infrastructure will also need to align with the phasing of development. As the intensity of development is increased, there will be opportunities to increase the frequency of public transport services as these become more viable due to increased demand and improve walking, wheeling and cycling infrastructure.

In terms of economic development, the strategic importance and functions of Severnside for the regional economy and for business have already been noted. The infrastructure needed to support low carbon economic growth will require partnership working across boundaries at an ASEA level. A long-term programme of interventions is needed to strengthen the brand as a nationally significant employment destination and deliver projects to support the main sectors and the skills base.

8.3. Funding infrastructure

To deliver the masterplan's interventions, funding must be identified and bids or business cases developed, supported by neighbouring unitary authorities and the West of England Combined Authority where necessary. Partnership working must be enhanced to draw on the capacity and expertise of relevant infrastructure providers such as transport and utilities companies, health and education providers, and government departments and agencies like Environment Agency and Department for Transport. There will be a need to coordinate infrastructure being provided directly by the private sector via planning agreements and form partnerships when a more complex public-private delivery mechanism is needed.

When considering funding for infrastructure, the wide variety of physical, economic and community infrastructure identified to support the growth options will be able to access funding at national, regional and local level from public and private sources.

Large scale transport, utilities and environmental interventions will rely on the local authority partnering with government departments, utilities providers and government agencies. While the availability of these larger budgets will fluctuate over the masterplan period

and with policy changes, the masterplan provides a long-term strategic justification for major infrastructure projects.

There are also various internal funding mechanisms which can be used to fund local transport and digital infrastructure, economic infrastructure, regeneration, community infrastructure and affordable and specialist housing. This includes the funding generated from business rates growth in the ASEA. Details of all potential funding sources can be found in the Appendix.

8.4. Delivery partners

An intervention strategy to maximise the potential of Severnside as a nationally important employment and innovation district and a high quality and sustainable residential and environmental/cultural area will require leadership and resources including:

- Local Authority leadership to communicate and implement the masterplan vision
- Regional and national government funding to support interventions at strategic and site level
- Engagement and support from existing communities to embrace the masterplan and benefit from its opportunities
- Long term collaboration and partnership with business and key partners at a strategic and site level
- Planning policies which underpin the masterplan vision

The most appropriate governance structure for delivering the masterplan will be decided, which will evolve as infrastructure planning and funding becomes more intensive– ranging from an informal steering group to development corporation- type

structure with its own funding and staff resources. PR/communications plan would need to be included.

The West of England Combined Authority and Bristol City Council may be part of this governance depending on the overlap with ASEA and regional initiatives like transport, skills, business support and inward investment.

Relationships with stakeholder groups who have been engaged to date will be maintained – developers and landowners, residents, business, community groups, cultural facilities, utilities providers, transport operators, government agencies, education and health providers.

As interventions and projects are developed, public-private delivery partnerships will be formed for the more complex and multi-faceted projects which may require their own governance and financial structures.

8.5. Infrastructure delivery

It is accepted that some of the growth will be market driven – such as the employment land that has extant planning consent – which will determine the timescales of developments, although some targeted growth may need public sector interventions for strategic and policy reasons, and this is covered in further detail below.

In terms of meeting the long-term aspirations and objectives of the masterplan, it is envisaged that a combination of the following delivery approaches could be used by the public sector working with private sector partners including landowners/developers, investors and businesses:

- Market led approach
- Strategic infrastructure investment

- Targeted project interventions

Market led approach

This is likely to account for most of the new development. Developers and landowners will respond to structural changes in the market – such as the shift to online retailing and rise of green technologies. The public sector role would largely be to guide and influence through planning policy. Site infrastructure would be funded by the developers but there may be public sector funding of strategic off-site infrastructure e.g. M49 junction, strategic flood defences.

Strategic Infrastructure investment

Sustainable growth would be encouraged by public sector led strategic infrastructure including transport improvements, utilities upgrades, green and blue infrastructure and improved public realm. This infrastructure will be designed to improve existing communities as well as growth areas. From an economic development perspective, the public sector partners may choose to intervene at a strategic level to facilitate high quality economic growth - for example through inward investment and branding, skills initiatives, and small-medium enterprise business support.

Targeted Project Interventions

The public sector may want to intervene proactively with the growth area partners to ensure the optimum economic benefit and housing outputs are delivered. The type and scale of interventions will vary particularly where external funding from government is proposed but could include:

- Local authority land acquisition and direct development to meet a specific policy objective - like Bristol and Bath Science Park
- Partnerships with industry - projects with industrial technology sectors like green tech, logistics and advanced engineering modelled on the GKN technology centre and National Composites Centre. These provide collaborative environments for research and business, and easy, low-cost access for SMEs to specialist equipment, prototyping facilities and expertise.
- Innovation and incubation accommodation to support start-up and scale up business. Ideally this will be based on a campus where networks of similar businesses and sector specialists are located to create deeper collaboration and technology transfer between academia, the prime companies and growing SMEs. Specialist and technical accommodation – this is unlikely to be developed speculatively but existing tech companies and the public sector should work together to identify long term supply of land for these facilities which can be vital to securing inward investment. Examples include labs, engineering test beds and prototype areas, super computer and data room facilities.
- These technology sectors and their employees will demand high standards of infrastructure to support their long-term investment. Physical infrastructure could include large and resilient power supplies, low carbon infrastructure /energy and heat networks, superfast digital infrastructure. Efficient public transport, green spaces, high

standard amenities and attractive neighbourhoods will also be key requirements.

- Skills and innovation projects with local universities and FE– key partners for innovation, research and technology transfer and partnerships with business. Developing the capacity of the local skills base for the key business sectors
- Partnership/joint ventures with landowners to create high quality employment space
- Other site-specific infrastructure projects – public realm, utilities, low carbon infrastructure, health, and social amenities - in exchange for landowners committing to developments that will achieve the masterplan objectives

8.6. Prioritising project interventions

When assessing the strategic impact of the different types of intervention, the value for money and costs of strategic and site-specific infrastructure projects is weighed against the potential high-quality jobs, housing, cultural and environmental benefits. Projects could then be prioritised for internal funding and for external funding bids.

The scale of benefits is indicative at this stage and will be assessed as interventions are brought forward, but the following provides a guide to the scale:

- Up to 7m sqft of new commercial space in the employment area (against 6.8m sqft currently) based on the current planning permissions only and not allowing for more intensive higher density developments like research and development (R&D)

- Around 8,000 jobs based on the current market trend for logistics use continuing. Noting that an increasing number of logistics jobs are high value and technology focused
- If around 30 per cent of this floorspace was developed as manufacturing, R&D, light industrial uses the job density could increase to support around 12,000 jobs
- An increasing number of jobs in the tourism and cultural attractions in the active green belt area - the Wave and Wild Place are currently employing c 200 people

The costs of interventions over a 30-year period will run into several hundreds of millions of pounds. Costs of individual interventions will be assessed when detailed scoping and design is undertaken.

When selecting projects deliverability will be key. Government funding programmes are usually seeking 'shovel ready' projects which can be delivered in less than five years. The following criteria will be important for selecting interventions:

A strong rationale for public sector intervention in infrastructure

- Overcoming market failure to ensure the area meets its full potential for sustainable economic, residential and cultural growth
- Promoting the area for inward investment
- Supporting growth of business key sectors – logistics, green technologies and renewables, advanced manufacturing
- Protecting existing homes and business e.g. flood defence, air quality, active travel

- Protecting nationally important natural environment and habitats

Permissions, consents and agreements

- Public sector owned land or legal agreements on third party land
- Having planning permission or the firm prospect of achieving it quickly

Funding

- Having local match funding alongside government funds

Political and local support, including strategic fit

- Having stakeholder and political support for the project
- Showing how the interventions have a strong strategic fit and will contribute to achieving the wider vision and objectives for the area and how projects will act as a catalyst for further activity

Quantifiable economic outputs and other additional value

- Having quantifiable economic outputs for high quality jobs and housing outputs to justify value for money
- Showing added value on factors like low carbon impacts and social value enhancements

Governance and procurement

- Having robust governance and project management structures
- Having agreed procurement and delivery methods for the capex and operational stages of the project

Economic strategy

- Supporting the Local Industrial Strategy and West of England economy – for example maintaining sufficient land for national and regional logistics and relocation of industry from regeneration areas in the city like St Phillips/Bedminster
- Inward investment -port development- green tech- national logistics (and contribution to urban and last mile logistics)
- Social amenities – new health, shops, education more self-contained communities
- Public realm, ESG (Environment, Social, Governance) considerations
- Flood defences, utilities for residents and business
- Transport benefits and active travel
- Green spaces and natural habitat, environmental gains, estuary protection
- Cultural and visitor and eco-economy in active Green Belt
- New residential growth to create balanced, self-contained communities

9. Moving forward

This masterplan began by **highlighting the distinctive strengths of Severnside** in terms of its coastal communities and rural villages, strong economic activity and unique natural environment. Through research into the existing geography, social, environmental and economic factors and reinforced through stakeholder engagement, **opportunities for change to amplify and enhance its strengths** have been identified.

A **clear vision and objectives** has been established to work towards over the longer term in partnership with the local community, businesses and key stakeholders. The strategy for achieving the vision and meeting the objectives is ambitious, however it is required in order to create the step change to address the issues and needs experienced in Severnside and by its communities.

Moving forward, interventions have been identified to begin to realise the vision, recognising the need to begin early feasibility and preparatory work for some of the longer term enabling infrastructure schemes, but also for short term, prioritises the need to build partnerships with the community, businesses and organisations to work together...

“To recognise Severnside’s unique communities and internationally important status, both environmentally and economically to attract and focus new investment.”

Appendices

Appendix A. Potential funding sources for delivery

A.1. South Gloucestershire Council funding

South Gloucestershire Council may use its capital programme to deliver elements of the masterplan that accord with the Council's priorities. The type of funding would depend on the role on an infrastructure intervention. For instance, if the project was related to land and property, it may deploy capital receipts, property investment funding or prudential borrowing. The capital programme includes capital grants and regional/WECA funding and CIL/S106 funds. These funding streams are described in more detail below.

A.2. Regional Funding

The West of England Combined Authority has programmes for funding transport and economic projects. This includes joint working with the 3 unitary authorities on major infrastructure projects such as the metrobus network and MetroWest.

South Gloucestershire Council is actively using the £200m Local Growth Fund, £500m Economic Development Fund and £57m Revolving Infrastructure Fund. Projects such as Bristol and Bath Science Park, Kingswood and Yate regeneration have used these funds.

Other regional funding routed through the West of England Combined Authority which may be relevant to Severnside infrastructure interventions include:

A.2.1. Land Acquisition Fund (LAF)

This is a revolving fund in that it expected to be repaid at some future point from land receipts. It provides capital funding for pre-construction, land acquisition and enabling works. South Gloucestershire Council recently obtained LAF for an Extracare development in Thornbury. Land could be acquired to secure a particular use or appropriate mix of development on within an employment, housing or mixed use scheme.

A.2.2. Regeneration and Housing Enabling Fund

The aim of the fund is to unlock priority places for growth and regeneration by facilitating and accelerating the feasibility and pre-planning process where there is a barrier preventing it from proceeding. The funding can be used for traditional enabling activities such

as scheme feasibility, site referencing and establishing delivery partnerships, and for specific projects that would deliver significant benefits over time. The basic principle is that revenue funding is available of up to £200K per project to take forward proposals which the Combined Authority and the UA s are not able to fund individually.

A.2.3. Development Infrastructure Fund

£21m fund for housing schemes based on the principle that up to £15K of grant is available per housing unit as gap funding and additional funding is available on top or separately as repayable grant. The focus is on schemes which are 50 units and larger and will provide capital funding for enabling works. The Council could use this to help shape a new residential development and ensure affordable and specialist housing was included.

These funds are expected to be in line with planning policy including affordable housing, and they encourage additionality factors including carbon reduction and sustainability, innovative design, modular construction, and social value benefits.

A.2.4. Transforming Cities Fund

£103m capital grant has been allocated for the development and construction of major transport schemes to help influence modal shift and encourage more use of public transport. The funds must be spent by March 2023 and form part of the Combined Authority Investment Programme of £350m up to that period.

A.2.5. City Region Sustainable Transport Settlement (CRTS)

The newly announced CRTS provides over half a billion pounds to the West of England to take forward transport priorities. The government has indicated this could be the first of an ongoing programme of 5-year settlements that would give the certainty to fund a long-term ambitious programme of transport improvements in the region.

Regional inward Investment and destination marketing is the responsibility of Invest Bristol and Bath and the Masterplan can be used as a resource to strengthen Severnside's inward investment offer.

A.3. Government Funding

The government's Levelling Up policy is being developed following the release of the Levelling Up White Paper in January 2022. The second round of the Levelling Up Fund closes on 6 July 2022 which offers £20m for regeneration and transport projects and a limited number of large transport schemes and cultural schemes which can bid for £50m.

Government and business research and development budgets are being increased particularly for knowledge sectors like low carbon, digital and life sciences. The Levelling Up White Paper puts a strong emphasis on increasing public and private R&D investment in the regions as well as general improvement to the education and skills base to support the growth of knowledge based and higher value jobs.

Similar opportunities are in government's Ten Point Plan for a Green Industrial Revolution to support green jobs, and accelerating the path to net zero. Private sector investment is responding to these research opportunities particularly strongly in sectors like life science and green technologies. Severnside should use its economic assets to capitalise on this – for example aerospace and advanced engineering and green industrial research and manufacturing. Given the scale of land available this should extend to major inward investment of the type seen in the north and midlands –circular economy industry, electric vehicle technology, off shore wind, battery giga plants etc. The skills base at regional and Severnside level should also be geared to these innovation and R&D opportunities with the universities and FE colleges creating bespoke programmes.

The Department for International Trade schedule of international investment opportunities shows how Severnside – along with other key regional employment areas like the North Fringe and city centre- should be positioning itself alongside other UK opportunities to attract inward investment [DIT Investment Opportunities](#)

A.3.1. Single Housing Infrastructure Fund

Details are awaited on the scope and timescales of this funding which was trailed in 2020 and 2021 Budgets. The original Housing Infrastructure Fund has been used successfully by local authorities to provide major infrastructure for larger housing and mixed use sites including off-site transport infrastructure with grants in the £100m-200m range.

A.3.2. DLUHC programmes

These includes Town Deal and Future High Streets Fund. These are currently closed with no future rounds announced. The £2.8 bn Levelling Up Fund is currently the main route for funding regeneration, transport and cultural projects. Although South Gloucestershire is

in the lowest priority category for support, compared to more deprived regions, funding is still available for high impact economic projects that deliver good value for money.

A range of benefits will be considered in the value for money appraisal of projects, including both quantitative and qualitative benefits. This includes potential to boost local economic growth, environmental benefits (including contribution to achieving the UK government's net zero carbon commitments and improving local air quality), greater employment opportunities, reduced travel times to key services, increased footfall in town and city centres, crime reduction, improved health and wellbeing, and social value to local communities.

A.3.3. Homes England

The Affordable Housing Programme 2021-2026 can be accessed by local authorities, RSLs and private sector developers and partnerships comprising these bodies. The funding is for the supply of new build affordable housing.

A.3.4. One Public Estate revenue funding

Funding is made available for projects that will unlock public sector sites for economic growth, new housing, and service transformation. Typically, it will fund detailed feasibility, master planning and the business case stage. Typical project funding would be £100-£200k. The expectation is that there is a collaboration between local and central government eg local authority and NHS. Projects need to be put forward as part of a West of England OPE programme bid through the Joint Assets Board.

A.3.5. Brownfield Land Release Fund

Capital funding for pre-construction, land acquisition and enabling infrastructure works to unlock local authority land for housing. Grant size up to £15k per unit. Future funding round anticipated but no date announced. Bid would have to be brought forward as part of a West of England Joint Assets Board bid.

A.3.6. UK Shared Prosperity Fund

This is the UK Government's replacement programme for EU structural funds. The prospectus was launched on 13 April 2022 with investment plans to be submitted this August. Local authorities have received a formula-based allocation and West of England CA has received £14m to be spent by 2025. Funding is predominantly revenue and can be invested in 3 priorities – communities and place, local business and people and skills [UKSPF prospectus](#). The programme would seem to offer potential to support softer economic infrastructure such as skills and business support.

A.3.7. Capability Fund

The Capability fund provides funds to local transport authorities outside London. This enables local transport authorities to promote walking and cycling in their areas via the development of infrastructure plans and carrying out behaviour change activities such as training and promotion.

A.3.8. Levelling Up Fund

The levelling Up Fund is designed to invest in infrastructure that improves everyday life. The fund supports town centre and high street regeneration, local transport projects and cultural and heritage assets. The fund runs until 2024 /25.

A.3.9. Local Growth Deals

Growth Deals provide funds to local enterprise partnerships or LEPs (partnerships between local authorities and businesses) for projects that benefit the local area and economy.

A.3.10. Large Local Majors

The Large Local Majors programme was set up in 2016 to cater to the small number of exceptionally large local highway authority transport schemes that could not be funded through normal routes such as Local Growth Fund or other developed allocations.

A.3.11. Active Travel Fund

The active travel fund grants funding for local transport authorities with producing cycling and walking facilities. A portion of the funding supported the installation of temporary projects for the covid-19 pandemic and the other portion supports the creation of longer-term projects.

A.3.12. City Region Sustainable Transport Settlement

This new City Region Sustainable Transport Settlement (CRSTS), which is an unprecedented investment in local transport networks, is a major driver for significant change. This new fund stems from the announcement made in 2019 that the 8 eligible English city regions would receive £4.2 billion of additional funding for local transport networks, one of the areas is the West of England around Bristol and Bath. That new money is at the core of this fund and should allow city regions to commence transformational change. The CRSTS aims

to work and deliver in the same way as the settlement established over the last 2 decades in London, creating a more consolidated and devolved model of transport funding and delivering significant improvements for users.

A.3.13. UK Subsidy Control

These regulations replace EU state aid law. The principle is that the subsidy provider such as a local authority or government funder will have to demonstrate that unfair subsidy is not being provided to private sector partners or other economic undertakings. The guidance on whether funding constitutes a subsidy and whether the subsidy is compliant is here [UK Subsidy Control](#). Infrastructure interventions which are dealing with market failure ie where the market is unwilling or unable to invest, and which provide additional benefits ie those which are not going happen anyway, should be capable of making a case to be compliant subsidies. Public infrastructure such as highways, green space and public realm would not be a subsidy as it is publicly owned and accessible to all.

A.4. Private Sector Funding

Given the potential scale of development to be unlocked over the next 30 years there will be developer directly built infrastructure to complement public sector investment plus S106 and CIL contributions - although the weakness of the extant planning permission in the employment area to obtain planning contributions is acknowledged. Site specific masterplans and site appraisals will identify the scale of private sector money that could be levied and the timescales over which it might be realised. There will undoubtedly be a need for the public sector to forward fund advance infrastructure to unlock some developments and recover developer contributions later.

Funded by the West of England Combined Authority & Local Enterprise Partnership through the Investment Fund, administered by the West of England Combined Authority.



HM Government



Atkins

Atkins Limited

The Hub
500 Park Avenue
Aztec West
Bristol
BS32 4RZ

Tel: +44 (0)1454 662000

Fax: +44 (0)1454 663333

© Atkins Limited except where stated otherwise