

Hampshire Infrastructure Gap and Opportunity Analysis

HPPB Meeting

19th January 2026

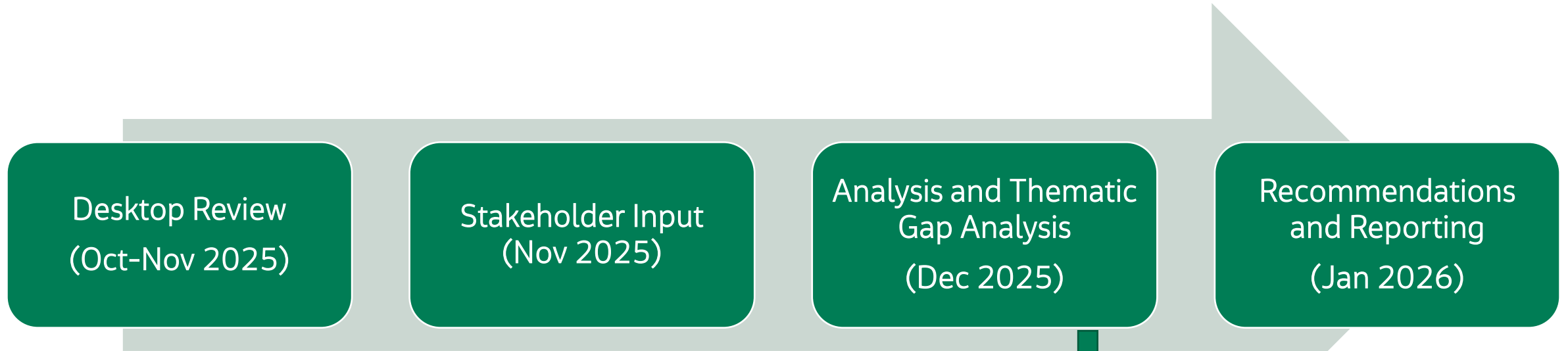
Overview

- Study Context
- Project Overview
- Discipline Areas:
 - Employment Land and Development
 - Digital Infrastructure
 - Transport Infrastructure
- Emerging Conclusions and Discussion
- Next Steps

Study Context

- To assist HPPB in targeting their Infrastructure workstream, Jacobs has been commissioned to undertake an **Infrastructure Gap and Opportunity Analysis** (action D2 within the Economy and Growth Plan for Hampshire).
- The study has sought to consolidate and develop an understanding of Hampshire's **infrastructure gaps** and identify the **highest priority infrastructure needs** across Hampshire and the Solent (including Southampton, Portsmouth and IoW), in order to make the case for investment.
- To achieve this, an up-to-date **evidence-based analysis** has been undertaken, with a specific focus on three key discipline areas:
 - Employment land and development;
 - Digital infrastructure;
 - Transport infrastructure.
- This presentation provides a high-level overview of the emerging findings and priorities from the study, a full report will follow.

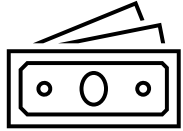
Project Overview



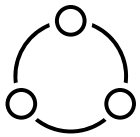
- A huge wealth of data has been reviewed and analysed to support with the emerging recommendations on infrastructure. This has included:
 - Planned and identified transport infrastructure
 - Employment land and development allocations through planning and real estate
 - Understanding the needs against the employment sectors
 - Digital equity and inclusion
 - Business constraints
 - Future needs and growth alignment

Employment Land and Development

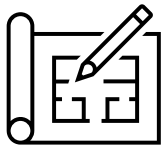
Summary Context



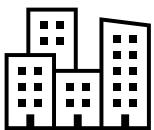
- Hampshire and the Solent region supports a **diverse economy** underpinned by a unique blend of coastal spaces, rural landscapes, national parks, and major industry clusters that contribute to making the sub-regional economy one of the best performing nationally.



- Key **strategic sectors** include aerospace, defence, marine, maritime, creative industries, logistics, professional services, digital industries, life sciences, and tourism.



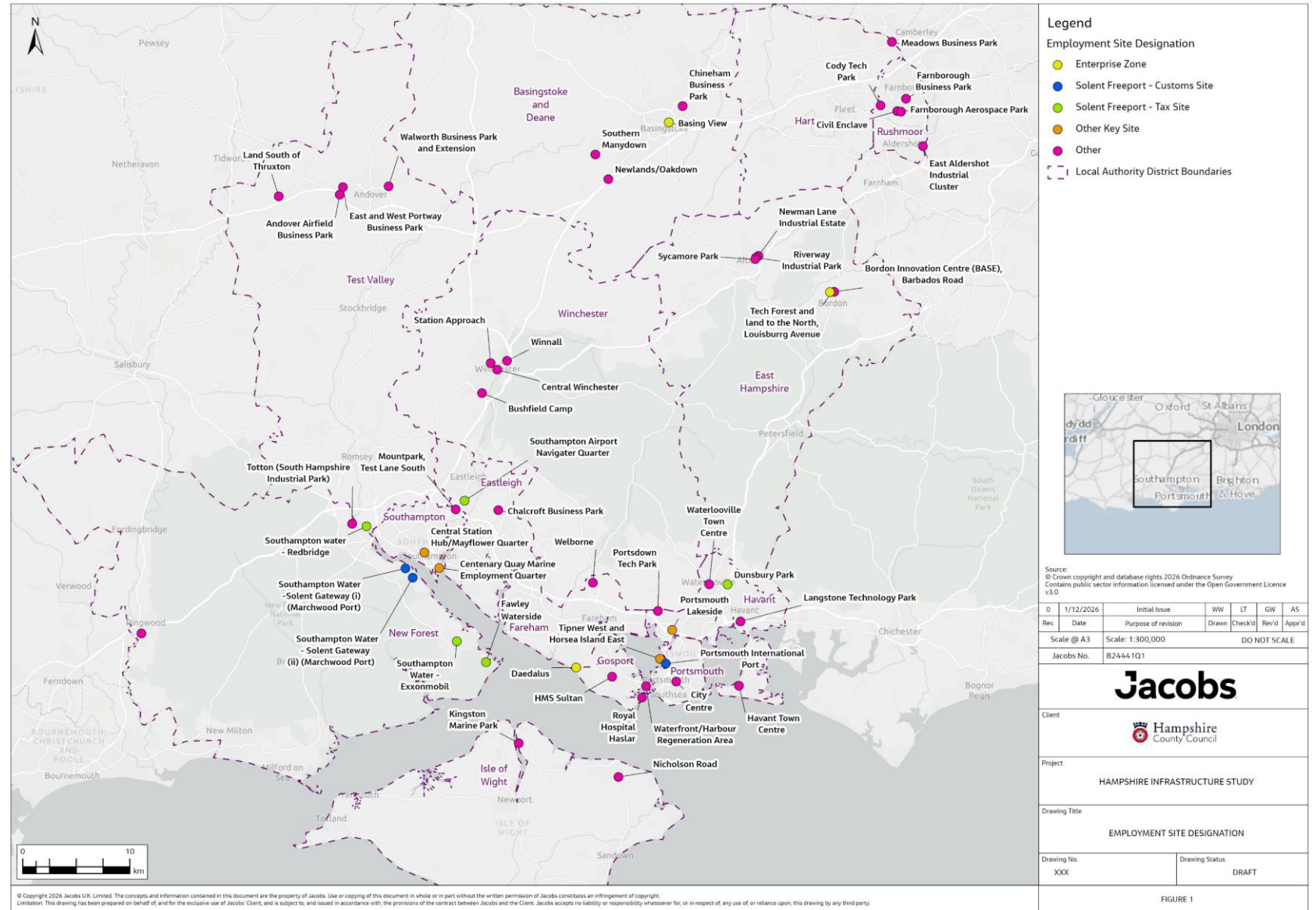
- From a **planning context**, existing and emerging Local Plans generally supply sufficient allocations of development land to meet forecast demand across the region. In some locations, there is a need for further employment land supply to meet forecasted demand (e.g. Basingstoke and Deane, Test Valley).



- From a **real estate context**, there is demand for an improvement in the quality of accommodation (particularly for the highest quality Grade A and units meeting corporate ESG targets), as well as increased flexibility and adaptability in the accommodation offered.

Planning Context

- To meet current and future demand for employment space, a range of key employment and development locations are identified within Local Plans and supporting documentation.
- These locations are distributed throughout the entire region. They include strategic development sites with special designation (e.g. enterprise zone or freeport status). Whilst these are concentrated in the Solent area, examples of these strategic sites are also found in East and North Hampshire.
- These key employment and development locations align well with the geographic distribution of 'strategic sectors'.



Real Estate Context

- Key challenges for the region revolve around improving quality and viability:
 - Poor Quality of Existing Stock of Commercial Real Estate
 - Large swathes of historic stock do not meet the quality standards necessary to meet corporate occupier requirements
 - The refurbishment costs to bring ageing stock up to standard is often not financially viable.
 - Viability Challenges in Delivering New Development
 - Rents would need to be 50% higher than prevailing rates to support speculative development.

This has resulted in an acute undersupply of appropriate accommodation across Hampshire and the Solent, which has driven a **'flight to quality'**, with firms relocating away or choosing to invest in other locations.



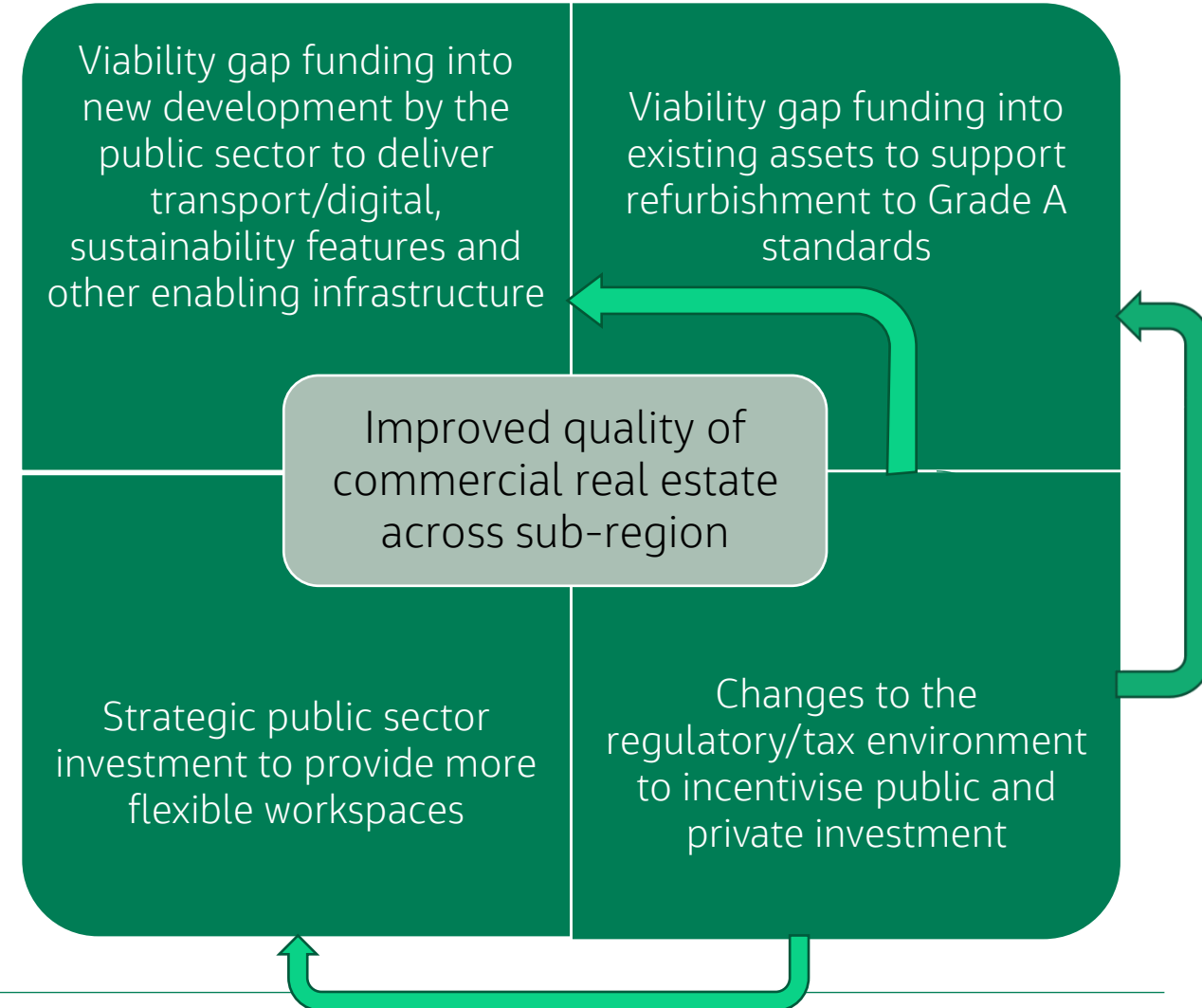
Key Challenges

- Bringing the economic, real estate and planning context together, the following implications for employment land/development arise:
 - In general terms, planning policy and the supply of suitable land for employment development is not a key constraint.
 - The mismatch between occupier preferences for quality and the generally poor condition of existing employment space is a bigger issue that could deter inward investment and provoke relocation away from the sub-region.
 - The presence of substantial viability challenges to new development impedes the region's real estate market in responding to occupier preferences for quality.

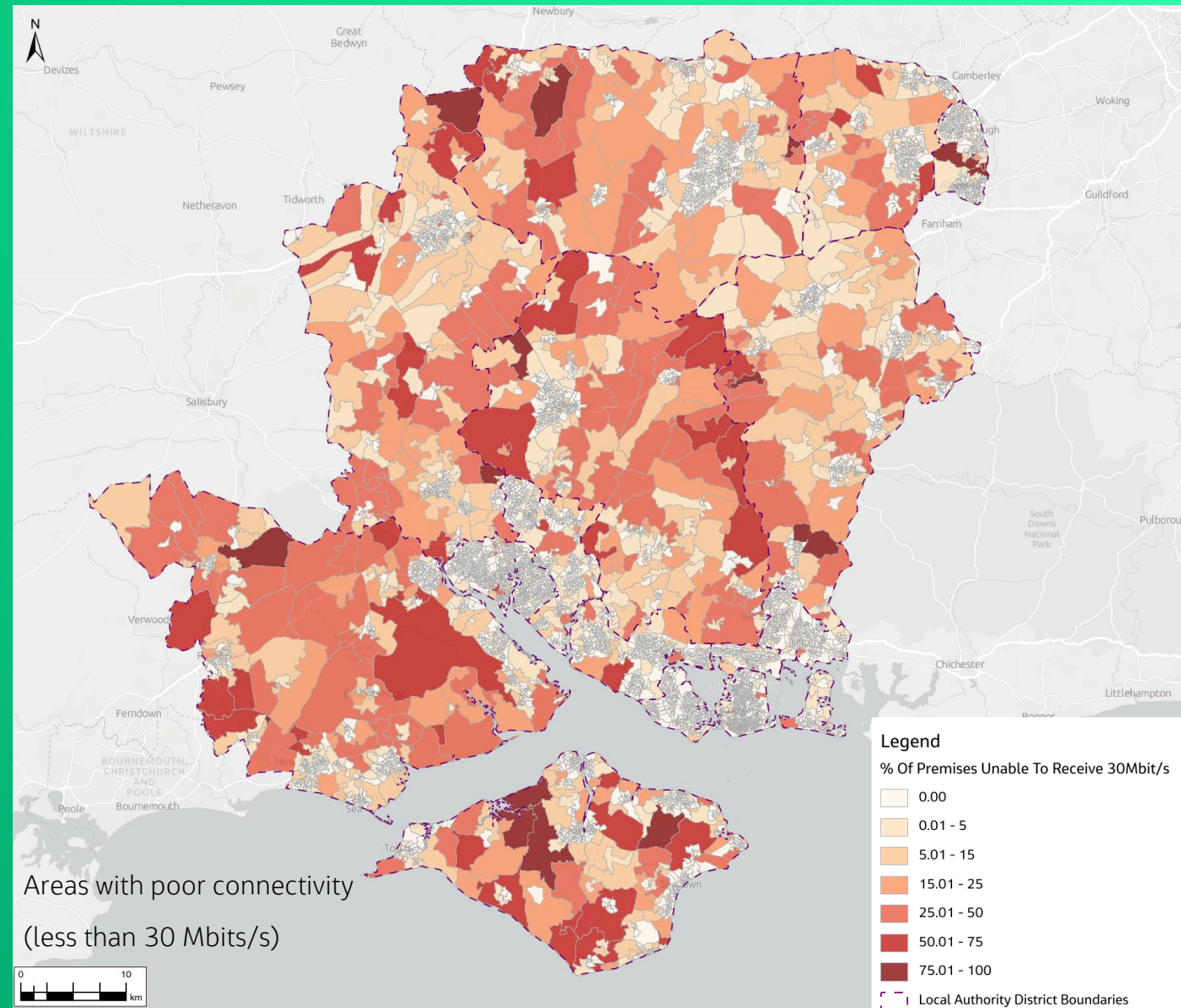
Viability therefore represents the biggest constraint on delivering appropriate employment land/development opportunities to support continued sectoral specialisation and drive continued economic growth in the sub-region.

Priorities

- Strategic Priorities
 - Respond to 'flight to quality' by:
 - Refurbishment of existing, ageing real estate assets; and,
 - Provision of new, high quality, sustainable real estate assets.
- These strategic priorities apply across the employment land and development pipeline across Hampshire and the Solent more generally. They can translate into focused priorities at 'strategic sites' that will improve viability and/or make the sites more attractive to inward investment.



Digital Infrastructure



Digital Infrastructure Gaps and Needs – Geographical Overview

This overview highlights where digital infrastructure gaps remain across Hampshire, despite high overall coverage, and why they matter for economic growth and inclusion. Addressing these gaps is critical to unlocking productivity, supporting growth in focused sectors, enabling SMEs to adopt digital tools, and ensuring the benefits of investment are shared across communities.

Area / Location	Connectivity status	Infrastructure gap	Why It Matters for Growth
Winchester District Rural & peri-urban (e.g. Cheriton, Kilmeston, Sparsholt, Wonston)	<ul style="list-style-type: none"> Gigabit coverage below county average Persistent sub 30 mbps pockets 	<ul style="list-style-type: none"> Major rural connectivity deficit — slow, unreliable broadband 	Constrains high-skill homeworking, SME growth, and digitalisation in a knowledge-economy district.
New Forest District (e.g. Brockenhurst hinterland, Nomansland, Godshill, Minstead)	<ul style="list-style-type: none"> Patchy Fibre to the Premises (FTTP) Limited mobile coverage 	<ul style="list-style-type: none"> Rural & coastal not-spots – fibre roll out contained by landscape challenges. 	Impact on provision of public digital services, affects industries such as tourism and hospitality
Test Valley– A303/A36 villages (e.g. Longparish, Stockbridge outskirts, Wherwell)	<ul style="list-style-type: none"> Towns are well served but villages lag behind 	<ul style="list-style-type: none"> Rural/peri-urban clusters with <30Mbps Patchy FTTP on A303/A36 corridor. Industrial clusters dependent on dedicated private connections instead of affordable full-fibre broadband. 	Key logistics/manufacturing corridor—poor digital infrastructure weakens growth capacity.
East Hampshire / South Downs (e.g. Steep, Hawkley, East Meon, Froxfield)	<ul style="list-style-type: none"> Towns are largely provisioned with FTTP Rural gigabit coverage is around two third 	<ul style="list-style-type: none"> Villages face fibre delivery constraints due to dispersed housing, challenging rural access routes and limited backhaul capacity 	Constrains SMEs, remote workers, and tech-linked growth in regeneration towns such as Whitehill & Bordon.
Southampton – urban micro not-spots	<ul style="list-style-type: none"> Citywide gigabit largely complete Some residential areas still rely on legacy infrastructure instead of new full-fibre connections. 	<ul style="list-style-type: none"> Constraint is no longer network availability, but building-level delivery and legacy internal infrastructure 	Digital and creative SMEs nearby affected by building-level gaps. Port-related businesses need reliable connectivity
Isle of Wight (Interior & SW Coast)	<ul style="list-style-type: none"> High overall FTTP 	<ul style="list-style-type: none"> Remaining 10–15% non-FTTP areas in rural interiors which is costly to deliver 	Affects tourism, marine/engineering SMEs; digital exclusion risk for rural communities

Digital Infrastructure Gaps and Needs – Geographical Overview

Area / Location	Connectivity status	Infrastructure gap	Why It Matters for Growth
Hampshire Fringe (Chilbolton Down, Lepe, Farley Chamberlayne, Ibthorpe)	<ul style="list-style-type: none"> Multiple slow-speed pockets Below-average FTTP 	<ul style="list-style-type: none"> Commercially unattractive to operators High risk of long-term exclusion 	Hard-to-reach areas limit inclusive growth
Portsmouth (Urban Core and high density estates)	<ul style="list-style-type: none"> largely covered by gigabit networks, but uptake remains uneven strong FTTP across city 	<ul style="list-style-type: none"> Cost and digital skills barriers limit take-up. Risk of digital exclusion older estates face inconsistent mobile coverage 	Constrained labour market participation and slow digital adoption among local SMEs, despite the city's overall strong network availability.
Industrial Estates (Andover, Chandlers Ford, Havant, Fareham)	<ul style="list-style-type: none"> FTTP provision varies High dependence on dedicated private connections 	<ul style="list-style-type: none"> No affordable "industrial standard" connectivity High cost of symmetric bandwidth 	Limits automation, IoT and analytics; reduces attractiveness for advanced manufacturing/logistics.
Waterside A326 Corridor (Totton–Hythe–Fawley)	<ul style="list-style-type: none"> FTTP patchy; mixed mobile 5G coverage 	<ul style="list-style-type: none"> Mobile 5G and gigabit gaps along key industrial/commuter corridor 	Critical for access to Freeport tax sites along Southampton Water; impacts advanced logistics and mobility.
Digital exclusion hotspots (Havant, Gosport, Portsmouth, Southampton)	<ul style="list-style-type: none"> High gigabit supply but low uptake 	<ul style="list-style-type: none"> Cost and skills barriers are limiting effective use of existing connectivity 	Reduces benefits of investment; constrains labour force participation and SME digitisation.

■ High Priority
 ■ Medium Priority

The highlighted areas have been prioritised for investment as they underpin Hampshire’s economic performance and inclusive growth due to the following factors:

- **High priority:** Focus on Freeport sites, ports, industrial estates and city centres where digital infrastructure delivers the highest economic return; gaps here directly constrain advanced manufacturing, logistics and investment.
- **Medium priority:** Target areas that support workforce catchments and SME ecosystems, where connectivity gaps limit labour participation, remote working and skills access

Digital Infrastructure – Sectoral Challenges

Sector	Current Gaps
Defence	<ul style="list-style-type: none"> • Full-fibre in defence-critical areas and including lack of resilient fibre routes around Portsmouth Naval Base. • Absence of local edge computers pushes high-value analytics to London or Corsham. • Lack of permanent private 5G test environments on MoD sites
Aerospace/ Space	<ul style="list-style-type: none"> • Loss of R&D trials and inward investment to competing aerospace clusters • Some Solent airfield business parks still lack full-fibre coverage and resilient connections, • Limited access to research-grade networks forces large simulation and design data onto standard broadband.
Maritime	<ul style="list-style-type: none"> • Large legacy dock estates lack universal full-fibre and modern internal connectivity • Lack of permanent port-wide 5G at Southampton compared with competing Freeports • Limited backhaul resilience at some Solent facilities
Creative industries	<ul style="list-style-type: none"> • Creative firms rely on upload-heavy workflows; weak fibre in older buildings pushes firms to competing cities • Poor in-building connectivity limits collaboration and growth • Lack of shared digital production infrastructure reduces competitiveness for smaller studios.
Digital industries	<ul style="list-style-type: none"> • Hampshire lacks a major digital exchange point; firms needing low-latency connectivity locate in London or Slough • Limited dark fibre restricts experimentation and high-performance networking along the M3 corridor • Patchy 5G undermines IoT testing and Hampshire's tech-ready reputation
Life Sciences	<ul style="list-style-type: none"> • Competing clusters (Oxford, Cambridge) offer far higher research connectivity and local data capacity • Inconsistent fibre across NHS sites limits innovation and collaboration • Without better digital infrastructure, Hampshire struggles to attract healthcare innovation initiatives.
Professional Services	<ul style="list-style-type: none"> • Competing business districts already offer universal fibre and managed connectivity • Mobile congestion and indoor signal gaps affect productivity and hybrid working • Loss of opportunities to competing clusters where resilient gigabit connectivity and in-building mobile coverage are standard
Logistics	<ul style="list-style-type: none"> • Many logistics parks rely on single fibre routes; outages can take out entire estates (e.g distribution sites in Test Valley and along A303 • Mobile blackspots on key corridors disrupt live tracking and fleet management • Other Freeports are already using private 5G for automated logistics; Hampshire risks losing future investment without action

Digital Infrastructure – Strategic Priorities

Strategic Priority	What to invest in
1. Targeted full-fibre resilience for Hampshire's economic engines	Prioritise multi-gigabit FTTP + dual routing to: <ul style="list-style-type: none"> • Ports & freeport sites • Defence & aerospace clusters • Science & health campuses • Strategic logistics corridors
2. Deploy Private 5G & Advanced Wireless in Strategic Clusters	<ul style="list-style-type: none"> • Establish dedicated 5G networks at ports, logistics hubs, defence bases, airports, and large industrial parks. • Support industry testbeds for autonomous systems, smart factories and IoT sensors in these zones via private 5G coverage and edge computing on-site.
3. Establish local edge data centres & cloud hubs	<ul style="list-style-type: none"> • Develop local data and computing hubs in South Hampshire • Strengthen direct, high-capacity connections from Hampshire sites to major cloud and research platforms.
4. Close the digital divide in rural and underserved areas	<ul style="list-style-type: none"> • Extend gigabit broadband and strong 4G/5G coverage to remaining rural “not-spots”, focusing on economically active rural areas. • Support digital inclusion programs in urban estates and rural communities. • Rural Hampshire is not a single connectivity challenge: chalk valley settlements, National Park villages and coastal hamlets each face distinct constraints and require tailored digital solutions.
5. Smart Growth Digital Infrastructure in New Developments	<ul style="list-style-type: none"> • Embed advanced digital infrastructure by design in all major development sites (e.g. Fawley Waterside Tipner West / Horsea Island Dunsbury Park, Solent Gateway & Freeport sites). This includes planning for - full-fibre duct networks, 5G coverage, IoT-ready ducting, shared data platforms.
6. Freeport digital spine	<ul style="list-style-type: none"> • Create a “Freeport Digital Spine” connecting Solent Freeport sites – a secure data platform and network linking port, tax and customs sites for seamless logistics and innovation sharing.

Transport Infrastructure

Characteristics of Movement in the Area

Geography

- Complicated geography in Solent area especially – Portsmouth constrained peninsula, Southampton river crossings, IoW only connected via ferry
- Impact on resilience

Access to International Gateways

- Congestion and capacity issues, including to Port of Southampton by rail and road – impacts on resilience
- Plans for Southampton Port throughput doubling by 2035
- Tourism important industry in parts of the region, especially connections to ports and IoW
- Connectivity to Gatwick and Heathrow currently poor

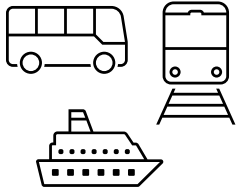
High levels of car dependency

- High car use and ownership, reflecting national trends
- Complicated and often long-distance trips for most purposes including commuting, education, health & leisure

Low levels of transport choice outside main urban centres

- High bus use in urban centres such as Southampton and successful schemes such as Eclipse
- But outside main urban centres services often infrequent or limited

Key Transport Issues



- There is **poor public transport connectivity** in some areas and **low levels of transport choice** outside main urban areas
 - While there are high levels of bus use in places like Southampton and successful schemes such as the Eclipse busway in Gosport, other areas suffer from less coverage
 - Bus delays (congestion)
 - Poor rural connectivity
 - Slow and infrequent local rail connections (e.g. Southampton – Portsmouth)
 - Congested rail links to London
 - Waterborne transport poorly integrated



- There are **poor active travel facilities** in urban areas and a need to make our streets and roads healthier places to move about and be, as well as a need to improve attractiveness of town centres and a need for urban regeneration to reduce journey trip lengths



- Need to **decarbonise and electrify fleets** to meet NetZero targets and deliver sustainable growth, but some limitations due to supply e.g. Southampton

Transport Infrastructure – Targeting Objectives

- Schemes have been identified and ranked based on the below criteria.
- A high-level overview table is included at the end of this presentation, while further detail on schemes and prioritisation will be documented in the final report.

Supporting development

Schemes that align most strongly with supporting development in the region

Supporting social inclusion

Schemes that address Transport Related Social Exclusion - highest levels are found in Gosport, Fareham, Isle of Wight, Waterside and Andover

Supporting other priorities

Schemes that support other agendas including environment and sustainability, economy

Transport Infrastructure – Key Priorities

■ Mass Transit Systems

- Opportunity for step-change in public transport service provision, routes should be designed to connect to key developments, mobility hubs/interchanges, and address key gaps in connectivity.

■ Improved access at Waterside and Gosport Peninsula

- Both areas with significant proposed development and large amounts of transport related exclusion – due to the area's geography, close to key economic centres but not as accessible. Opportunity to improve connections to unlock development and increase social inclusion.

■ Improved facilities for freight

- Southampton Port envisages doubling of throughput by 2035 – need to provide suitable facilities for large growth in freight given constrained geography, and in order to reduce impact on road network and make growth sustainable, there is a need to increase capacity for rail freight in particular.

■ Improve active travel and urban centres

- Improvements to active travel networks in urban centres are required to support sustainable mode shift, as well as a need for urban regeneration to reduce journey trip lengths

Emerging Conclusions

Summary of Findings – Strategic Priorities

- Key priority strategic infrastructure needs/priorities across the three discipline areas:

Sector	Priorities
Employment land	<ul style="list-style-type: none">• Respond to 'flight to quality' by refurbishing existing, ageing assets and providing new, high quality, sustainable assets• Attracting inward investment / viability gap funding
Digital	<ul style="list-style-type: none">• Targeted full-fibre resilience for Hampshire's economic engines• Deployment of Private 5G & Advanced Wireless in Strategic Clusters• Establish local edge data centres & cloud hubs• Close the digital divide in rural and underserved areas• Smart Growth Digital Infrastructure in New Developments• Freeport digital spine
Transport	<ul style="list-style-type: none">• Mass Transit Schemes• Improved access at Waterside and Gosport Peninsula• Improved facilities for freight• General support of new development and economic growth

Next Steps

- Collation of feedback from HPPB members
- Finalising recommendations both by discipline and overlapping disciplines and geographies
- Completion and issue of final report paper

Discussion



Challenging today.
Reinventing tomorrow.



Background Evidence

Employment Land / Development: Key Challenges and Priorities (ii)

- These strategic priorities apply across the employment land and development pipeline in Hampshire and the Solent more generally. They can translate into focused priorities at 'strategic sites' that will improve viability and/or make the sites more attractive to inward investment.

Site	Opportunity for Viability Gap Funding
Dunsbury Park	<p>Transport: Local and strategic road network decongestion and capacity improvement schemes.</p> <p>Transport: Sustainable travel links (active mode, public transport) to Leigh Park and Waterlooville.</p> <p>Digital: Continuous 4G/5G coverage along key freight corridors (M3, A34, A303, M27) and across yards and loading bays.</p> <p>Digital: Robust Wi-Fi 6/6E inside warehouses for automation and real-time inventory.</p>
Central Station Hub/Mayflower Quarter	<p>Environment: Strategic flood defence.</p> <p>Transport: Local active mode connectivity improvements between central station and shopping areas.</p> <p>Transport: Major transformational infrastructure (e.g. Green Bridge to Mayflower Park; Portland Link).</p> <p>Transport: Extensive public realm improvements.</p> <p>Transport: Highway works to Mayflower Cirtcus and Maritime Boulevard</p> <p>Digital: Universal gigabit-capable access (FTTP or cable) for town- and city-centre offices, with business-grade SLAs.</p> <p>Digital: Reliable 4G/5G in central business districts, stations and key transport corridors. • Secure connections to cloud and sector-specific platforms (legal, financial, consultancy).</p>
Centenary Quay Marine Employment Quarter	<p>Transport: Public realm improvements to Woolston.</p> <p>Enabling Works: Support for site remediation</p> <p>Digital: Universal gigabit-capable access (FTTP or cable) for town- and city-centre offices, with business-grade SLAs.</p> <p>Digital: Reliable 4G/5G in central business districts, stations and key transport corridors. • Secure connections to cloud and sector-specific platforms (legal, financial, consultancy).</p>
Southampton Airport (Navigation Quarter)	<p>Transport: Strategic road network decongestion and capacity improvement schemes.</p> <p>Environment: Potential local flood defence.</p> <p>Transport: Enhanced active mode linkages</p> <p>Transport: Improved road and servicing infrastructure into the site.</p> <p>Transport: Replacement of Wide Lane Rail Bridge with a new structure capable of accommodating HGV traffic in both direction as well as active modes.</p> <p>Digital: Dedicated high-capacity links to cloud/HPC and national research networks (e.g. JANET).</p>
Southampton Water - Solent Gateway [1]	<p>Environment: Protection or reprovision of protected habitats or other sensitive environmental receptors.</p> <p>Transport: Major highway improvements to the A326 between West Totton and Dibden.</p> <p>Digital: Continuous 4G/5G and robust Wi-Fi across port estates, yards and berths for IoT, tracking, automation and worker safety.</p>
Southampton Water - Solent Gateway [2]	<p>Transport: Major highway improvements to the A326 between West Totton and Dibden.</p> <p>Digital: Continuous 4G/5G and robust Wi-Fi across port estates, yards and berths for IoT, tracking, automation and worker safety.</p>

Employment Land / Development: Key Challenges and Priorities (iii)

Site	Opportunity for Viability Gap Funding
Southampton Water -ExxonMobil	<p>Transport: Major highway improvements to the A326 between West Totton and Dibden.</p> <p>Digital: Continuous 4G/5G and robust Wi-Fi across port estates, yards and berths for IoT, tracking, automation and worker safety.</p>
Southampton Water - Fawley Waterside	<p>Transport: Major highway improvements to the A326 between West Totton and Dibden</p> <p>Transport: Reopening of the Waterside rail line between Totton, Marchwood and Hythe Town</p> <p>Environment: Environmental enhancements and mitigations to the Strategic Land Reserve/SSSIs</p> <p>Transport: Dredging/widening of the main navigational channel to Southampton Port</p> <p>Digital: Continuous 4G/5G and robust Wi-Fi across port estates, yards and berths for IoT, tracking, automation and worker safety.</p>
Daedalus EZ	<p>Transport: Improvements in active mode infrastructure from Rowner to Daedalus.</p> <p>Transport: Provision of westward bus routes to Rowner, Daedalus and Lee-on-the-Solent.</p> <p>Transport: Highway improvements to aid western access to Fareham and Gosport and address traffic congestion</p> <p>Transport: Enhance BRT / Eclipse bus services including junction improvements to improve accessibility</p> <p>Transport: A27 Segensworth to Fareham Capacity and Junction Improvements – measures to remove bottlenecks on this key east to west corridor for local and strategic traffic and to improve capacity at key interfaces with north south access routes to the peninsula.</p> <p>Digital: Highly resilient fibre backhaul into port community systems and customs/logistics platforms.</p>
Portsmouth Lakeside	<p>Transport: New Lakeside access to aid development of Lakeside North Harbour - Portsbridge Roundabout (c. £2.0m)</p> <p>Transport: New direct access 'Lakeside Access' (c. £2.4m).</p> <p>Transport: Accessibility improvements, including reinstalling pedestrian crossing and improving crossing environment for pedestrians at junctions.</p> <p>Utilities: Wastewater network reinforcement</p> <p>Digital: Secure, resilient multi-gigabit FTTP (1–10 Gbps) into key defence estates and supply-chain sites, with dual-routed connections.</p> <p>Digital: Dedicated high-capacity links to cloud/HPC and national research networks (e.g. JANET).</p>
Tipner West and Horsea Island East	<p>Environment: Provision of new flood defences at Tipner west (£32m)</p> <p>Transport: Horsea-Tipner Link Bridge: to provide a public transport / active modes link between Tipner and Horsea Island and improve sustainable travel network. (>£10m)</p> <p>Enabling Works: Relocation of Harbour School's Bay Campus (SEND)</p> <p>Utilities: Reinforcement or connection to gas network infrastructure would be required</p> <p>Utilities: Wastewater network reinforcement</p> <p>Transport: Tipner Transport HUB Scheme - P&R (>£10m)</p> <p>Digital: Gigabit+ FTTP to all waterside industrial, port and logistics locations (quay-edge, older estates as well as new parks).</p> <p>Digital: Dedicated high-capacity links to cloud/HPC and national research networks (e.g. JANET).</p>
Portsmouth International Port	<p>Transport: Continental Ferry Port FCERM Scheme - Provide new / improve the standard of existing coastal defences . (£8.5m, only c. 50% available from EA)</p> <p>Transport: Upgraded junction at Whale Island Way: Potential provision of a new junction to meet the needs of a new ferry service and associated facilities .</p> <p>Transport: Rudmore Square right hand turn: Addition of right hand turn and adoption of Whale Island Way to facilitate HGV traffic flow. (<£500k)</p> <p>Transport: Container Shuttle to Fratton railfreight yard/ Fratton Railfreight Hub.</p> <p>Transport: Tipner Transport HUB Scheme - P&R (>£10m)</p> <p>Digital: Secure, resilient multi-gigabit FTTP (1–10 Gbps) into key defence estates and supply-chain sites, with dual-routed connections.</p> <p>Digital: Dedicated high-capacity links to cloud/HPC and national research networks (e.g. JANET).</p>

Digital infrastructure needs for high priority sectors (1/3)

This sectoral analysis sets out the digital infrastructure required to position Hampshire's key economic clusters as competitive, investable locations, taking inspiration from best practice provision. The focus is not minimum connectivity, rather targeted upgrades needed to enhance attractiveness, and support and scale high-value activity.

Sector	Clusters	Digital infrastructure needs to support attractiveness	Current gaps
Defence	<ul style="list-style-type: none"> Requirements: Industrial estates, naval docks, secure R&D facilities. Spatial focus: Portsmouth Naval Base; Gosport, Fareham; Farnborough defence and aerospace technology campus; Winchester and Andover MoD sites. 	<ul style="list-style-type: none"> Ultra-secure multi-gigabit full-fibre rings (1–10 Gbps symmetric FTTP) into naval and defence manufacturing zones – with dual-diverse routing for resilience. Private 5G networks for estates for autonomous vehicles, secure communications, real-time testing of sensors and UAVs. Local edge compute/data centres within the Solent region to host modelling, simulation and cyber-analytics locally. 	<ul style="list-style-type: none"> Historic under-provision of full-fibre in defence-critical areas (notably Gosport) creates operational and investment risk Lack of resilient fibre routes around Portsmouth Naval Base undermines continuity for defence suppliers Absence of local edge compute pushes high-value analytics to London or Corsham, weakening Hampshire's defence offer No permanent private 5G test environments on MoD sites limits innovation pilots
Aerospace/ Space	<ul style="list-style-type: none"> Requirements: Large hangars, flight-testing facilities, design labs, corporate offices. Spatial focus: Farnborough; Daedalus Airfield (Lee-on-Solent); Eastleigh (Southampton Airport); Portsmouth University innovation districts; Basingstoke Navigation Quarter. 	<ul style="list-style-type: none"> Full-fibre connectivity to every airfield, hangar and lab, with reliable gigabit speeds to support testing, digital design and data-heavy engineering work Direct high-capacity links between aerospace sites and university research and cloud platforms to support joint R&D with Southampton and Portsmouth universities Private 5G across airfield zones to enable drone and UAV testing, smart maintenance systems and real-time sensor data 	<ul style="list-style-type: none"> Competing aerospace clusters already offer dedicated 5G test facilities; without similar capability, Hampshire loses R&D trials and inward investment Some Solent airfield business parks still lack full-fibre coverage and resilient connections, creating risk for data-intensive firms Limited access to research-grade networks forces large simulation and design data onto standard broadband, putting Hampshire firms at a competitive disadvantage.

Digital infrastructure needs for high priority sectors (2/3)

Sector	Clusters	Digital infrastructure needs to support attractiveness	Current gaps
Maritime	<ul style="list-style-type: none"> • Requirements: Ports, shipyards, logistics parks and marine manufacturing • Spatial focus: Port of Southampton; Portsmouth International Port; Marchwood; Solent Enterprise Zone (Gosport) 	<ul style="list-style-type: none"> • High-capacity fibre across quays, warehouses and customs zones (1–10 Gbps) • Permanent site-wide private 5G at Southampton and Portsmouth ports to support asset tracking, automated gates, drones and assisted operations • Local edge computing to support low-latency control, and digital twins. 	<ul style="list-style-type: none"> • Large legacy dock estates still lack universal full-fibre and modern internal connectivity • Other Freeports are deploying permanent port-wide 5G; Southampton risks missing automation and investment without it • Limited backhaul resilience at some Solent facilities puts future smart-port programmes at risk
Creative industries	<ul style="list-style-type: none"> • Requirements: Studios, production spaces and co-working hubs • Spatial focus: Winchester; Basingstoke; Rushmoor/Hart gaming cluster; Portsmouth city-centre media firms 	<ul style="list-style-type: none"> • Affordable symmetric fibre (300 Mbps–1 Gbps) in town-centre creative hubs • Upgraded internal wiring, Wi-Fi and mobile coverage in converted and historic buildings • Access to dedicated gigabit lines for post-production, and broadcasting 	<ul style="list-style-type: none"> • Creative firms rely on upload-heavy workflows; weak fibre in older buildings pushes firms to competing cities • Poor in-building connectivity limits collaboration and growth • Lack of shared digital production infrastructure reduces competitiveness for smaller studios.
Digital industries	<ul style="list-style-type: none"> • Requirements: R&D offices, software campuses and data-intensive startups • Spatial focus: Farnborough Cody Tech Park; Basing View (Basingstoke); Winchester digital corridor; Andover Business Park 	<ul style="list-style-type: none"> • Multi-gigabit, open-access fibre across all tech parks • Regional data centre and cloud hubs to support AI, fintech and cyber firms • Strong 5G coverage around transport hubs and innovation districts 	<ul style="list-style-type: none"> • Hampshire lacks a major digital exchange point; firms needing low-latency connectivity locate in London or Slough • Limited dark fibre restricts experimentation and high-performance networking along the M3 corridor • Patchy 5G undermines IoT testing and Hampshire’s tech-ready reputation

Digital infrastructure needs for high priority sectors (3/3)

Sector	Clusters	Digital infrastructure needs to support attractiveness	Current gaps
Life Sciences	<ul style="list-style-type: none"> • Requirements: Laboratories, clinical R&D sites and hospital innovation campuses • Spatial focus: Southampton Science Park; Southampton General Hospital; Eastleigh; Andover 	<ul style="list-style-type: none"> • Symmetric gigabit fibre to every lab and research facility • Secure, high-capacity links between hospitals and universities for research collaboration • Smart campus connectivity to support connected devices, training tools and real-time monitoring 	<ul style="list-style-type: none"> • Competing clusters (Oxford, Cambridge) offer far higher research connectivity and local data capacity • Inconsistent fibre across NHS sites limits innovation and collaboration • Without better digital infrastructure, Hampshire struggles to attract healthcare innovation initiatives.
Professional services	<ul style="list-style-type: none"> • Requirements: Corporate offices and finance/legal hubs • Spatial focus: Southampton city centre; Winchester and Basingstoke 	<ul style="list-style-type: none"> • Business-grade gigabit broadband across all commercial centres • Reliable in-building mobile coverage in high-rise and historic offices • Low latency, fast, secure access to cloud platforms for professional services workflows 	<ul style="list-style-type: none"> • Competing business districts already offer universal fibre and managed connectivity • Mobile congestion and indoor signal gaps affect productivity and hybrid working • Hampshire loses professional services growth to London, Reading, Guildford, Oxford and Brighton where resilient gigabit connectivity and in-building mobile coverage are standard
Logistics	<ul style="list-style-type: none"> • Requirements: Distribution parks and large warehouses • Spatial focus: Andover A303 corridor; M3/A34 freight routes; Fareham and New Forest depots 	<ul style="list-style-type: none"> • High-capacity fibre and gigabit leased lines into all depots • Private 5G in large yards to support automated vehicles and equipment • Dense, reliable indoor Wi-Fi for scanners and sensors 	<ul style="list-style-type: none"> • Many logistics parks rely on single fibre routes; outages can take out entire estates (e.g distribution sites in Test Valley and along A303) • Mobile blackspots on key corridors disrupt live tracking and fleet management • Other Freeports are already using private 5G for automated logistics; Hampshire risks losing future investment without action

Transport Infrastructure Schemes (1/2)

The table below outlines some of the key identified transport infrastructure schemes across Hampshire and the Solent.

Infrastructure	Supporting development	Supporting social inclusion	Supporting other priorities
Southampton Central station upgrade and associated rail frequency enhancement on the Botley and Netley lines	✓	✓	✓
Southern rail access to Heathrow airport	✓		✓
Waterside - A326 Large Local Majors improvements	✓	✓	✓
Gosport and Fareham active travel improvements	✓	✓	✓
Woking rail flyover	✓		✓
Basingstoke rail freight bypass	✓		✓
M3 Junction 9 upgrades (under construction)	✓		✓
Healthy Streets infrastructure	✓	✓	✓
Town centre regeneration schemes	✓	✓	✓
Grid capacity for decarbonisation of transport	✓	✓	✓
Rail electrification (Eastleigh – Salisbury, Basingstoke – Salisbury)	✓	✓	✓

Transport Infrastructure Schemes (2/2)

Infrastructure	Supporting development	Supporting social inclusion	Supporting other priorities
South East Hampshire Rapid Transit	✓	✓	✓
Southampton Mass Transit System	✓	✓	✓
Basingstoke Mass Rapid Transit	✓	✓	✓
Isle of Wight BRT		✓	✓
Other schemes supporting Solent Rail Metroisation	✓	✓	✓
Road freight facilities – lorry driver facilities beyond study area boundaries	✓		✓
Waterside Branch Reopening	✓	✓	✓
Westward bus routes to Rowner, Daedalus and Lee-on-the-Solent	✓	✓	✓
Improved ferry connections (Gosport and Hayling Island from Portsmouth, IoW to Southampton)		✓	✓
Rail Freight Hubs (Havant, Fratton, further afield towards Bristol / Midlands / London)	✓		✓
Mobility Hubs (Tipner, Southsea, M271 J1)	✓	✓	✓
Southampton and Portsmouth Cycle Network Improvements	✓	✓	✓