



Thriving life







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# The urban imperative

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**The time is now.**

**The global urban population will grow from 8 to 10 billion in the next 30 years.**

**We need to make better use of resources, taking an approach that achieves much more with much less.**

**We need to prioritise the creation of thriving life over the satisfaction of materialism. To seek long-term productivity over short-term profits.**



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# Thriving life in buildings & urban places

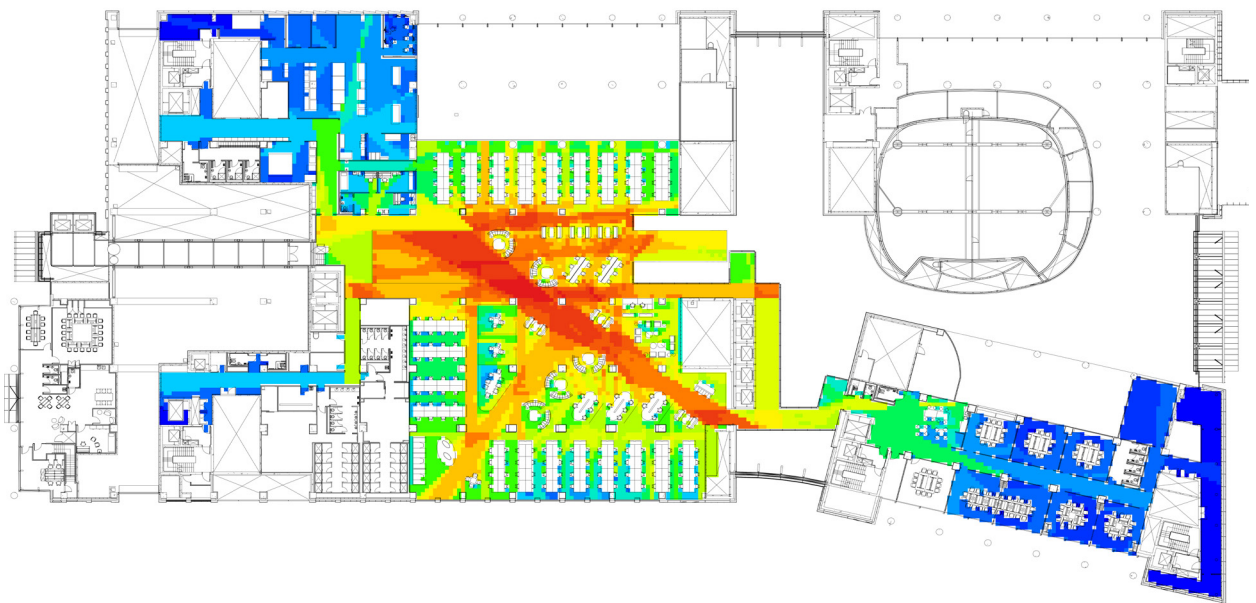
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## We are global leaders in spatial intelligence

- helping organisations harness the power of spatial connectivity
- driving the long-term performance of built assets
- de-risking investment decisions
- delivering social, financial & environmental resilience.

## We **craft** compelling future visions

- transforming data-driven insights into development actions
- providing strategic planning & design advice from concept to detail
- identifying the essential features of sustainable, liveable & healthy futures
- quantifying long-term impacts to facilitate decision-making.





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We **build** the **capability** of our clients & communities

- delivering online & in-person training packages
- developing digital tools
- enhancing the productivity of planners, designers & analysts.

We are trusted, experienced & **expert**

- Offering valued advice & insights to investors, developers, designers, owners & operators since 1989.



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# The problem at the heart of development... and our solution

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The world of professional practice is **siloed** between people who focus on individual systems, individual activities and individual outcomes - working at different scales.

As a result, advice is **fragmented** and can be contradictory. The combined effects of multiple inputs are unmeasured and decisions become fraught with **risk**.

The loudest voice or the most glamorous CGI is often the winner.

At Space Syntax we apply **spatial intelligence to integrate** across scales and across silos. Our science-based, human-focused approach leverages proven digital tools to **connect** what professional practice has separated. We help our clients make important decisions that have real and radical impacts on people's lives.

Our spatial connectivity tools make this integration possible. Validated over 35 years of practice, they organise and interrogate datasets to explain how places work today.



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In partnership with **our expertise**, these tools inspire ideas for physical and spatial change. Our targeted insights **communicate** clearly to all involved.

At every scale, the Space Syntax approach turns complex, multi-dimensional challenges into clear, measurable strategies that all stakeholders can understand, debate and implement.

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# Our vision

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**A built environment in which human society thrives. This requires the right balance of connectivity, movement, awareness, encounter and exchange at every scale of placemaking.**



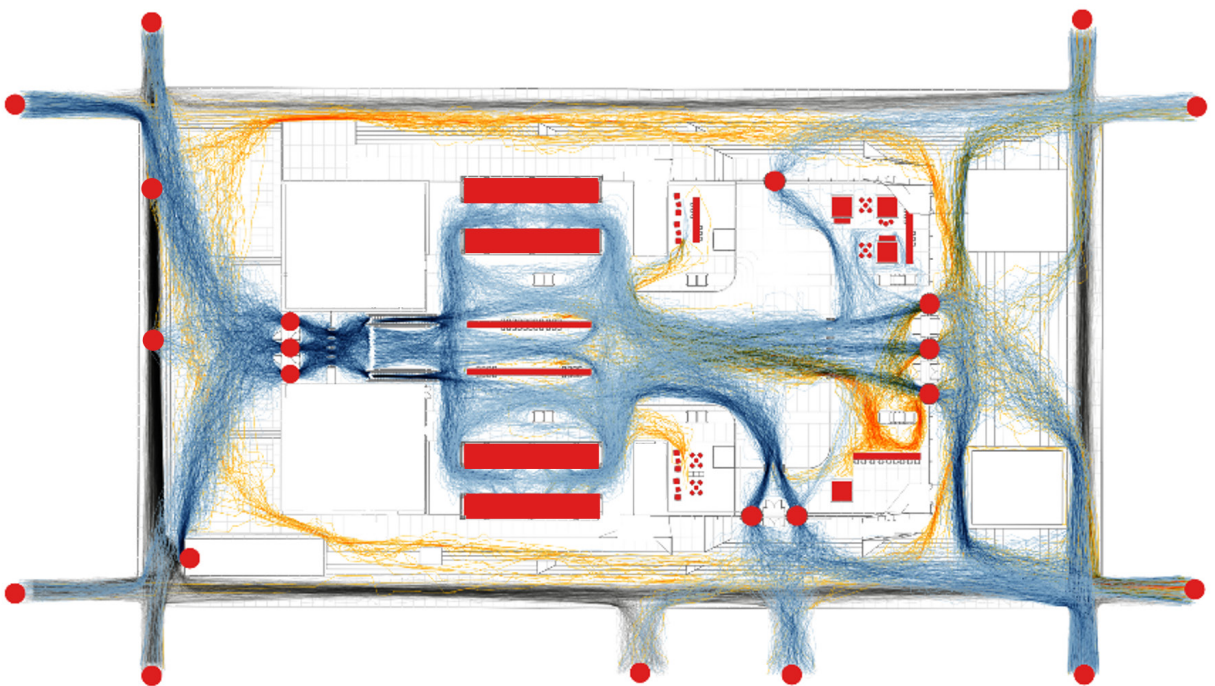


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# Our mission

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To enhance the social, economic and environmental performance of buildings and urban places by **applying, developing, and disseminating** a science-based, human-focused approach to their planning, design and operation.



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# Our **spatial intelligence** approach

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**Space Syntax provides creative expertise in architecture and urban planning. Operating worldwide, we combine global design experience with advanced digital technology.**

**Our science-based and human-focused approach forecasts the social, economic and environmental impacts of development proposals on the lives of people.**

*"I know these techniques work from the tough environment of practice. I love the world of analysis, observation, research but also of passion, imprecision, the hunch. Space Syntax is the testing of the interaction of these opposing worlds."*

**Norman Foster  
Foster + Partners**

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## **01 Appraisal & benchmarking**

**Location analysis & spatial connectivity assessment. User behaviour surveys, asset performance appraisals & benchmarked insights that provide evidence for policy-creation, brief-writing and design development.**

## **02 Strategic planning & design**

**Data-driven planning and design strategies that inspire audiences and optimise performance outcomes. Vision-led concepts at every scale: from national, regional & metropolitan plans to urban development proposals & building layouts.**

## **03 Performance forecasting**

**Location analysis & spatial connectivity assessment. User behaviour surveys, asset performance appraisals & benchmarked insights that provide evidence for policy-creation, brief-writing and design development.**



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# **We provide strategic planning & design consulting at all scales...**

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## **Cities & regions**

**We help public and private organisations forecast the performance of large urban areas, from individual towns to entire national networks. Our modelling platforms assemble data on spatial layout, land use and transport connectivity.**

**Addressing issues of mobility, land use vitality, access to employment, wealth distribution, car dependency, community cohesion and health inequality, Space Syntax analysis helps to put human performance at the heart of policies and action plans.**

## **Streets & public spaces**

**We work with the developers of complex real estate projects to shape patterns of effective footfall and space use and, in doing so, to enhance property values.**

**From initial concept sketching and design testing, to planning negotiations and technical analyses, we provide a creative and evidence-rich approach to urban planning, design and impact forecasting.**

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## **Buildings & estates**

**Acting across a wide range of sectors, from shopping centres to research departments, parliamentary offices to passenger terminals, we study existing space-use patterns and advise building owners on redevelopment options.**

**By putting the movement and interaction of people at the heart of the design process, we help organisations create places that work for their occupants.**

### **Asset classes**

**Transport  
Residential  
Mixed-use  
Workplace  
Retail  
Healthcare  
Cultural  
Education  
Government**

# Cities & regions

## Milton Keynes Spatial Growth Plan 2050 Milton Keynes Council, UK

*Spatial development  
and transport mode shift  
potential modelling*

Modelling of land use, population density, street network and public transport scenarios to forecast future transport mode shift potentials.

## City of London City of London Corporation, UK

*Pedestrian movement  
modelling*

Creation of a Pedestrian Movement Model to demonstrate the impact of committed development proposals as well as Crossrail and Thameslink. The model helps to deliver environments that enhance walkability, economic activity and social conviviality.

## Astana Masterplan 2030 City of Astana, Kazakhstan

*Generative  
masterplanning and  
urban design proposals*

Development of generative design tools, based on analysis of characteristics found in successful cities. Creation of an international competition-winning design concept.

## Jilin Lightrail Corridor and Stations Jilin Municipality, Jilin Province, China

*Transport masterplan  
and urban development  
strategy*

Creation of a comprehensive, integrated approach to public transport and urban space design. Scenario testing and impact modelling.

## Cranbrook Healthy New Town East Devon District Council, UK

*Healthy cities design  
advice*

Modelling of links between health, wellbeing and urban form to inform the spatial development of Cranbrook Healthy New Town.

## Thamesmead Peabody, UK

*Healthy urban places  
strategy*

Development of an urban morphology and mobility evidence base and planning assessment framework to support the ongoing regeneration of the public realm in Thamesmead.

## Jeddah Strategic and Structure Plan City of Jeddah, KSA

*Planning and strategic  
development advice*

Creation of integrated urban modelling and planning approach to accommodate 20 years of forecast population and employment growth in a way that improves the performance of the city.

## Darwin City Centre City of Darwin, Northern Territory Government, Australia

*Urban masterplanning  
and land value impact  
modelling*

Urban analysis and strategic design, impact modelling of pedestrian movement and land value to quantitatively evaluate the proposed designs.

“Your work is an invaluable aid to considering design approaches. You should know that it is now baked into design briefs and much of what we consider.”

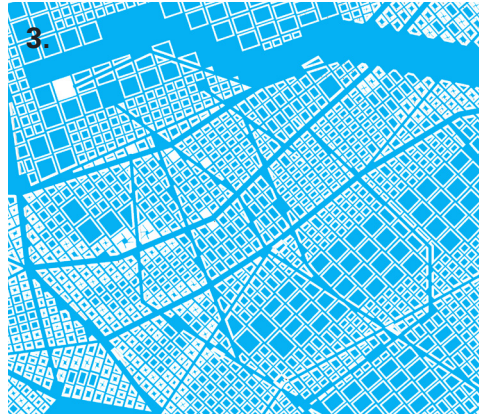
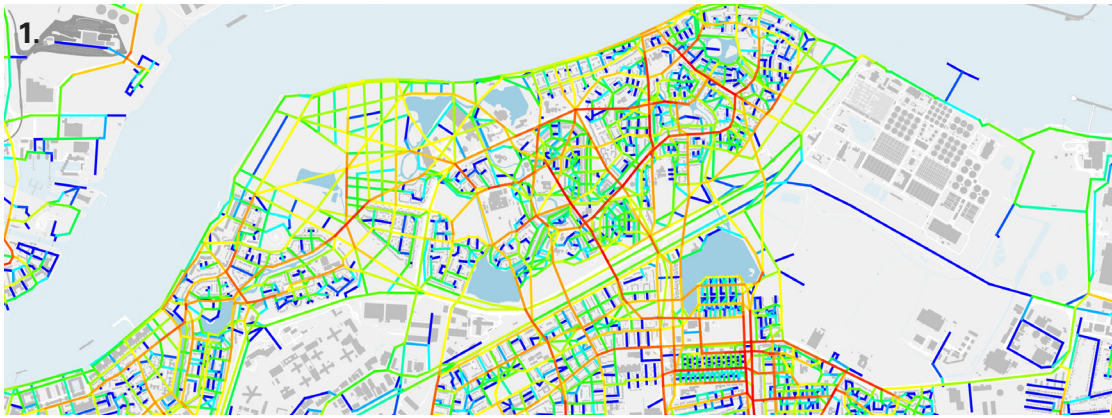
**Phil Askew, Director Landscape & Placemaking, Peabody**





Space Syntax's masterplan for the future of Astana, Kazakhstan has been created through a place-based and data-driven design process.









1. Thamesmead spatial accessibility model, used to develop and test regeneration proposals in terms of their walkability.

2. Darwin CBD masterplan, showing the proposed urban extension in the context of the existing city centre.

3. Astana masterplan, generated using a place-based and data-driven design process.

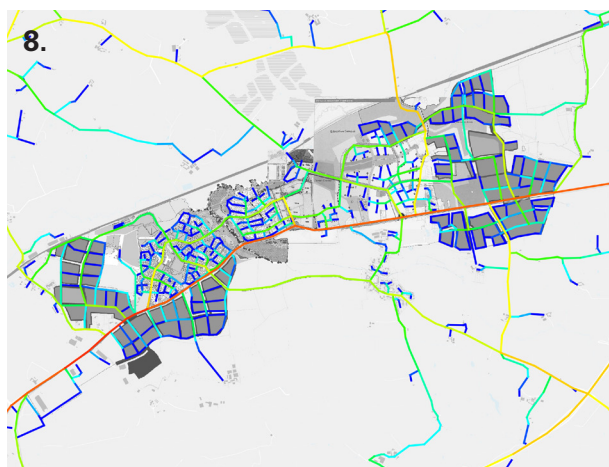
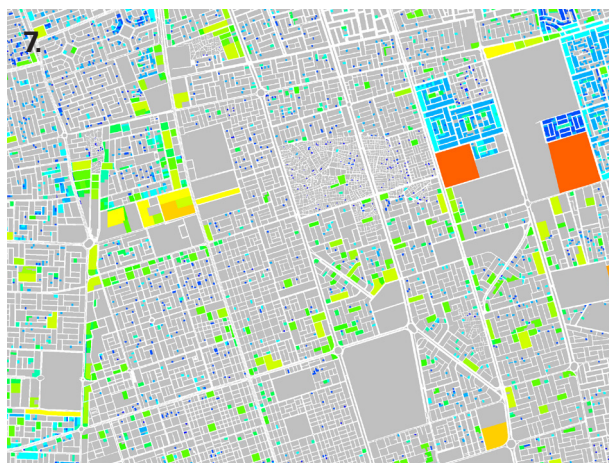
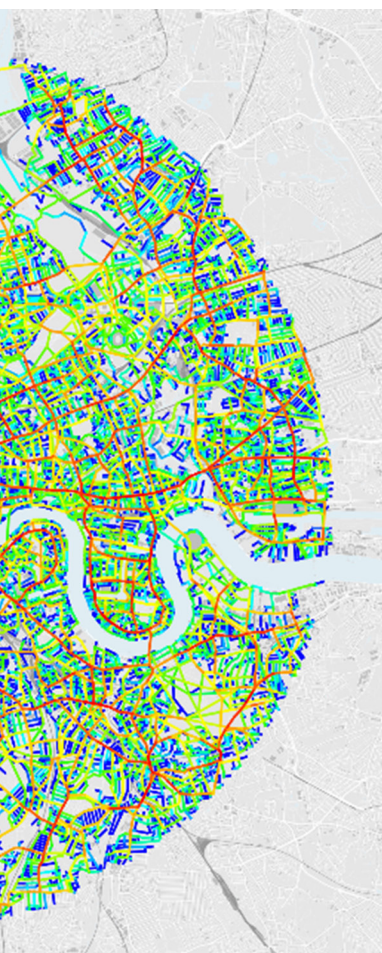
4. Jilin Metro design strategy, from line alignment and station location to public space masterplan and station concept designs.

5. Integrated Urban Model of Milton Keynes, combining data on spatial layout, land use and public transport accessibility to address car-dependence and social isolation.

6. Pedestrian Movement Model of the City of London, used to test the individual and cumulative impacts of development proposals on walkability and pedestrian density.

7. Vacant land analysis in Jeddah, supporting the creation of a city-wide planning strategy.

8. Cranbrook Healthy New Town spatial accessibility modelling, used to develop a walkable street network that supports a healthy lifestyle.



# Streets & public spaces

## Bloomberg London Bloomberg

*Urban design, building circulation and workplace design advice*

Urban design advice and pedestrian movement forecasting. Entrances and lobby design advice. Internal circulation and workspace design advice.

## Elizabeth House HB Reavis

*Planning support related to urban and landscape design*

Urban design advice and pedestrian movement forecasting. Entrances and lobby design advice. Future scenario modelling including station development proposals.

## One New Change Land Securities

*Spatial layout design advice*

Urban design advice and pedestrian movement forecasting, informing retail strategy and planning negotiations.

## Earl’s Court Capco

*Evidence-based masterplan design advice*

Urban analysis and strategic design. Modelling of pedestrian movement impact to quantitatively evaluate and optimise emerging residential neighbourhood designs and development of design briefs.

## 22 Bishopsgate Lipton Rogers Developments

*Planning support related to urban and landscape design*

Urban analysis and pedestrian and cycling movement forecasting, informing design development, stakeholder engagement and planning negotiations.

## Rathbone Square Great Portland Estates

*Planning support related to urban and landscape design*

Urban analysis and pedestrian movement forecasting, informing discussions with future tenants and supporting planning negotiations.

## The Post Building Brockton Capital

*Urban baseline studies and design development advice*

Mapping and analysis of cultural and open space amenity, pedestrian movement forecasting and public realm design advice, supporting planning negotiations.

## Television Centre Stanhope

*Evidence-based masterplan design advice*

Urban analysis and modelling of pedestrian movement impact to quantitatively evaluate and optimise emerging residential layouts and character areas.

“Space Syntax’s analysis and design contribution helped unlock the scheme. The evidence they presented proved critical in promoting our design and convincing people that it would work.”

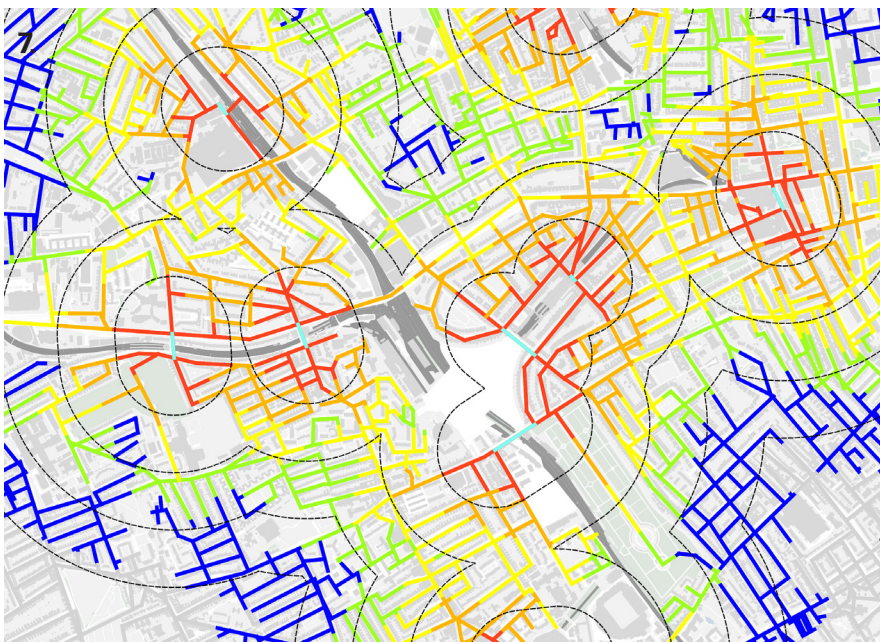
**Neil Porter**  
**Gustafson Porter + Bowman**





View of St. Paul's Cathedral from the central space of One New Change in the City of London, designed by Ateliers Jean Nouvel with spatial layout design input from Space Syntax.









1. Redevelopment of Television Centre London with new public realm and pedestrian access.

2. & 3. Pedestrian movement models showing the effect of the new pedestrian link through the Bloomberg Headquarters in the City of London along the historic alignment of Watling Street.

4. & 5. Public realm concept designs for the area surrounding the Post Building, London.

6. The new route and public space at Rathbone Square, London.

7. Pedestrian movement analysis for the Earl's Court development in West London.

8. View of the first floor retail of One New Change in the City of London.

9. Visualisation of the entrance to 22 Bishopsgate from St. Helen's Square in the City of London.



# Buildings & estates

## Stratford International Quarter Lendlease

*Masterplan and public realm design advice*

User experience modelling, advice on optimisation of public realm infrastructure and landscape design proposals.

## UCL East Masterplan UCL Estates

*Masterplan and public realm design advice*

Urban analysis and design impact modelling, to evaluate and optimise emerging masterplans for a new campus in the Queen Elizabeth Olympic Park.

## Manchester Institute of Biotechnology University of Manchester

*Design advice focusing on interaction and communication*

Development of design principles and spatial models to develop and test emerging proposals that encourage interaction and innovation.

## Natural History Museum Natural History Museum

*Visitor circulation strategy*

Development and testing of strategic circulation interventions to optimise visitor flow, engagement and experience.

## Southbank Centre Southbank Centre

*Estate-wide development advice*

Evidence based advice on estate development including masterplanning, public realm and visitor experience, and workplace design.

## Hillingdon Hospital Pilot Department of Health and National Patients' Safety Agency

*Ward layout study*

Evaluation of ward layout for the delivery of care, focussing on the impact of 100% single room accommodation in hospital wards.

## Museum of 20th Century Berlin Staatliche Museen zu Berlin

*Visitor circulation and design impact study*

Development of visitor circulation models to test and optimise the design for a major new art museum in Berlin's Kultur Forum.

## The V&A Exhibition Road Quarter Victoria & Albert Museum

*Visitor circulation and design impact study*

Analysis of existing visitor flows and development of future visitor flow scenarios to test the impact of design proposals on wayfinding and capacity.

"The perspective you brought to our campus masterplanning exercise was invaluable. Space Syntax is the best thing we've come upon in a long time."

**Dean Wolf**

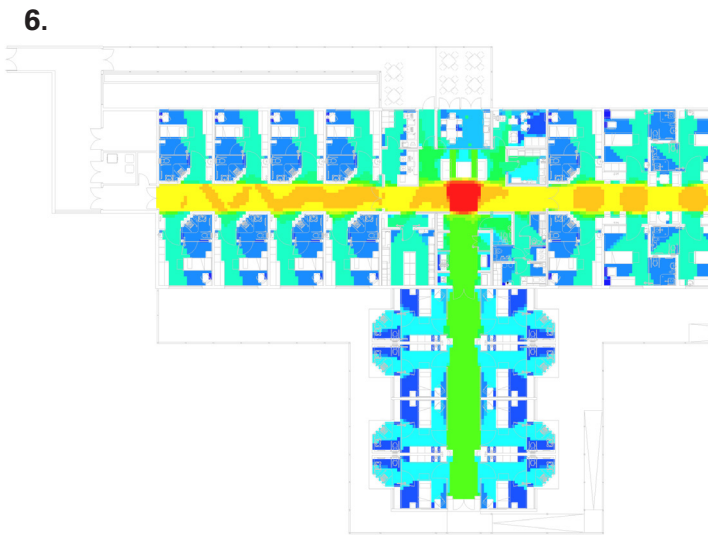
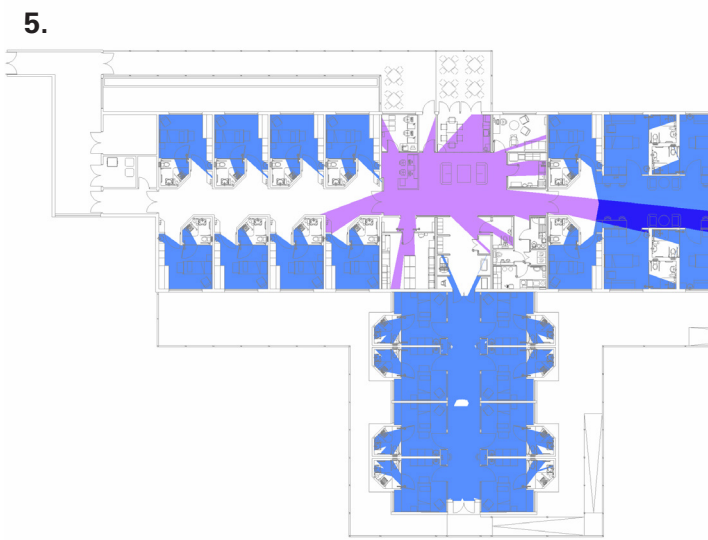
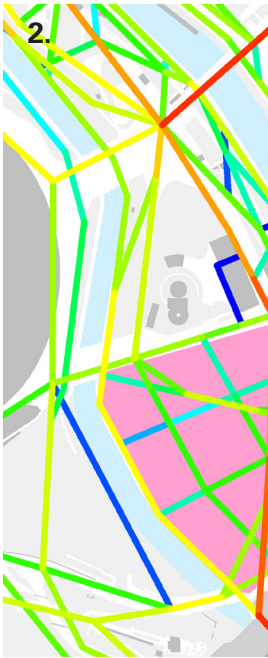
**Executive Vice President of Auraria Higher Education Center in Denver**





Atrium of the Manchester Institute of Biotechnology, John Garside Building, an interdisciplinary research institute bringing together approximately 600 researchers working in physics, chemistry, mathematics, computation, engineering and biology.







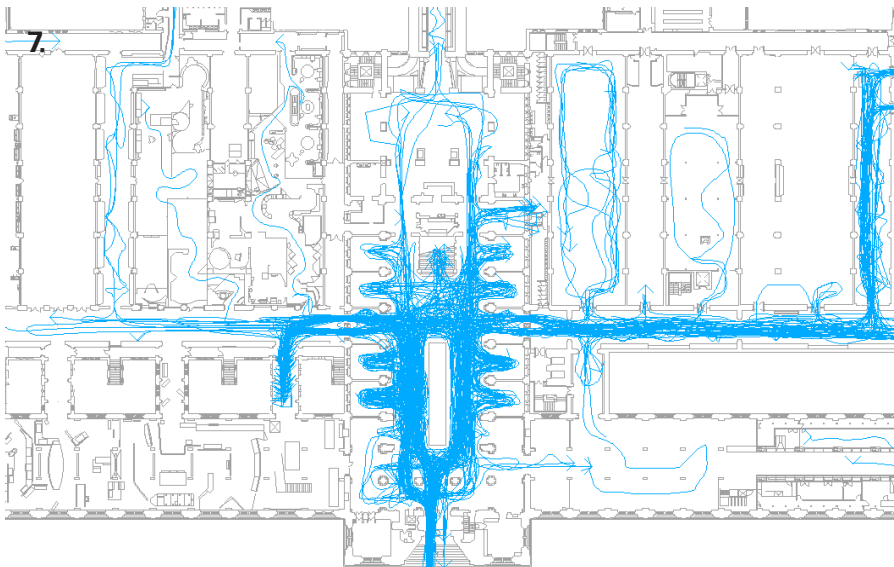


1. Visualisation of the public realm at the heart of the International Quarter of the Queen Elizabeth Olympic Park, London.

2. Spatial accessibility analysis of pedestrian connections in the Queen Elizabeth Olympic Park, London.

3. & 8. The Sackler Courtyard at the V&A, London, providing a new entrance, public space and underground gallery.

4. Spatial layout analysis of the Manchester Institute of Biotechnology, used to develop a layout that creates opportunities for chance meetings between researchers.



5. Visual field analysis of patient beds and nurse station at the Hillingdon Hospital, London.

6. Spatial layout analysis of a ward at the Hillingdon Hospital, London.

7. Analysis of visitor movement patterns at the Natural History Museum, London.



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# **We help our clients build their internal capability...**

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## **Training**

**We train individuals and organisations in the use of our science-based and human-focused approach through face-to-face classroom teaching as well as the Space Syntax Online Training Platform, an open access learning environment.**

## **Research**

**We investigate the questions raised by practice as part of a process of continuous service improvement. We undertake extensive in-house research, we partner with likeminded organisations and we act as industrial sponsors of independent, academic activities.**

## **Digital development**

**We write algorithms and create software-based tools to analyse the performance of buildings and urban places. We connect Big Datasets and train Artificial Intelligence (AI) to understand and simulate effective new environments. Using three decades of international project-based experience, we shape the planning and design tools of the future.**





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# Adding value

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## Revealing

**This is the key strength of the Space Syntax approach. Our reputation is based on a highly creative use of technology to identify the essential design features of urban and building design projects.**

**We provide valuable insights regarding the location, linkage, layout, land use and landscaping of projects that influence human activity and, in doing so, drive the human and environmental performance of places.**

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## Measuring and improving

**The Space Syntax approach is built on a set of evidence-based methods that forecast whether proposed policies, strategies, plans and designs will work to create the social, economic and environmental benefits that they are expected to.**

**We give stakeholders and decision-makers reassurance when a design is developing in a favourable way, or we alert them when it is in danger of going off track and they need to act.**



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## **Facilitating**

**Our methods allow us to speak a common, 'spatial' language that bridges across disciplinary boundaries and translates the objectives of planners, designers, transport engineers, economists, developers, investors and members of the public in such a way that they can be understood by all and organised into meaningful, practical frameworks for action.**

## **Why space matters**

**Walkability  
Car dependency  
Air quality  
Public health  
Access to jobs  
Access to services  
Access to education  
Land value  
Safety and security  
Economic vitality**

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# Accelerating innovation

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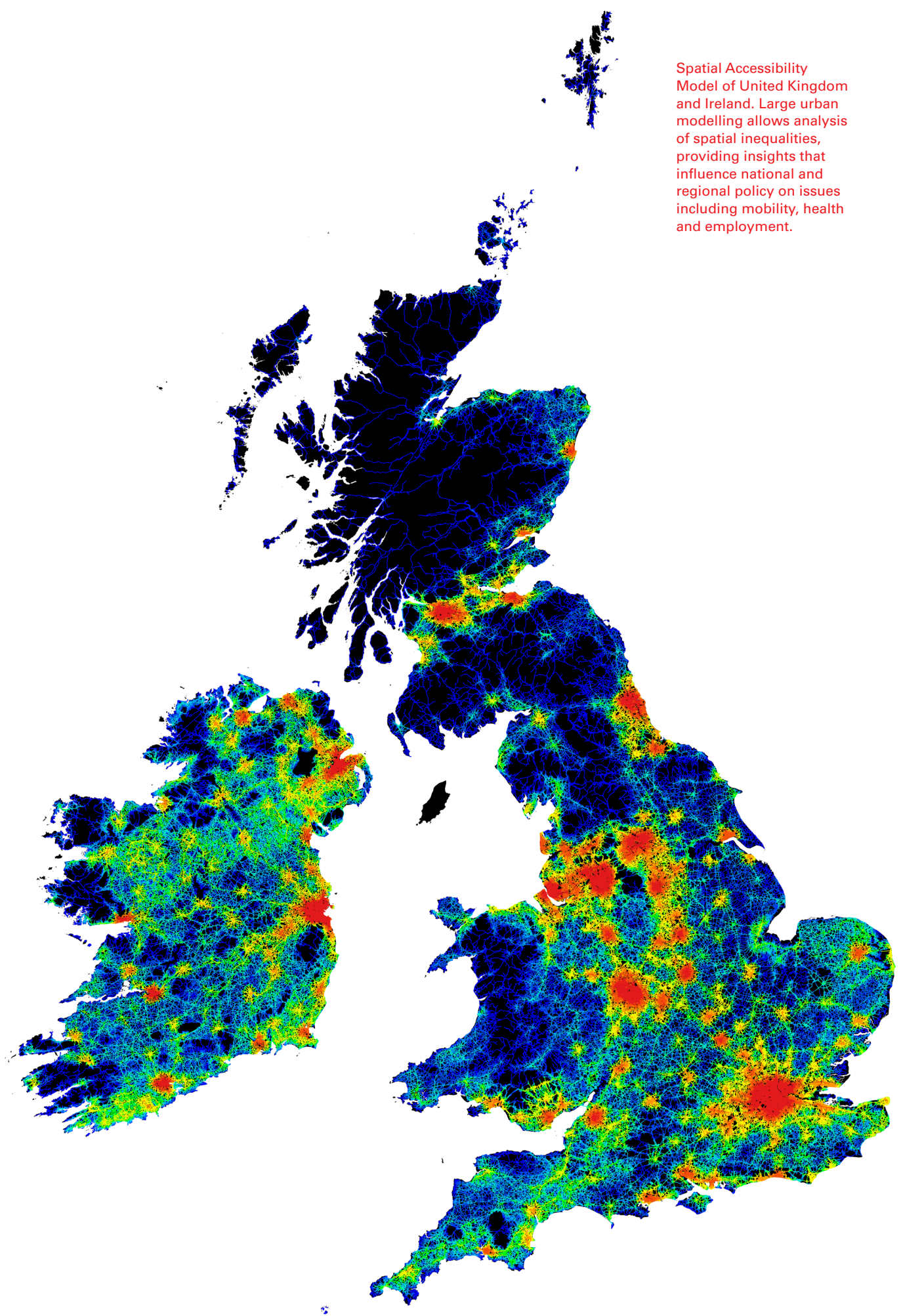
Working with public, private and community organisations, we apply a range of digital modelling tools using a principled, outcome-focused approach. From strategic spatial models that provide a rapid, robust picture of mobility and location hierarchy, to micro-simulations and Integrated Urban Models that use AI techniques to explore multiple datasets, our focus is always on the creation of thriving life in buildings and urban places. In doing so, we help people see, in clear and straightforward terms, how space can be designed to optimise its human performance.

Through a historic programme of internal research and an international network of university collaborations, we continuously develop our digital technologies and design methods. This process of incremental improvement is peer reviewed, published and presented at significant academic events. We have found that the live-testing of new ideas is an accelerator of innovation.

We disseminate the Space Syntax approach through multiple free and paid-for channels. We provide training that is tailored to client needs, ranging from short CPD sessions to multi-year programmes. These courses are supported by the Online Training Platform, a free-to-use resource that acts as the instruction manual for the Space Syntax Toolkit, our open source software suite. We also make spatial modelling datasets available, on a fee-based and open basis, the latter including the OpenMapping model of the United Kingdom and Republic of Ireland. Our goal is to embed the Space Syntax approach in everyday urban planning and design practice.



Spatial Accessibility  
Model of United Kingdom  
and Ireland. Large urban  
modelling allows analysis  
of spatial inequalities,  
providing insights that  
influence national and  
regional policy on issues  
including mobility, health  
and employment.



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# Look before you leap

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**The spatial layout of buildings and urban places exerts a powerful influence on human behaviour. The way that places connect is directly related to the way that people move, interact and transact.**

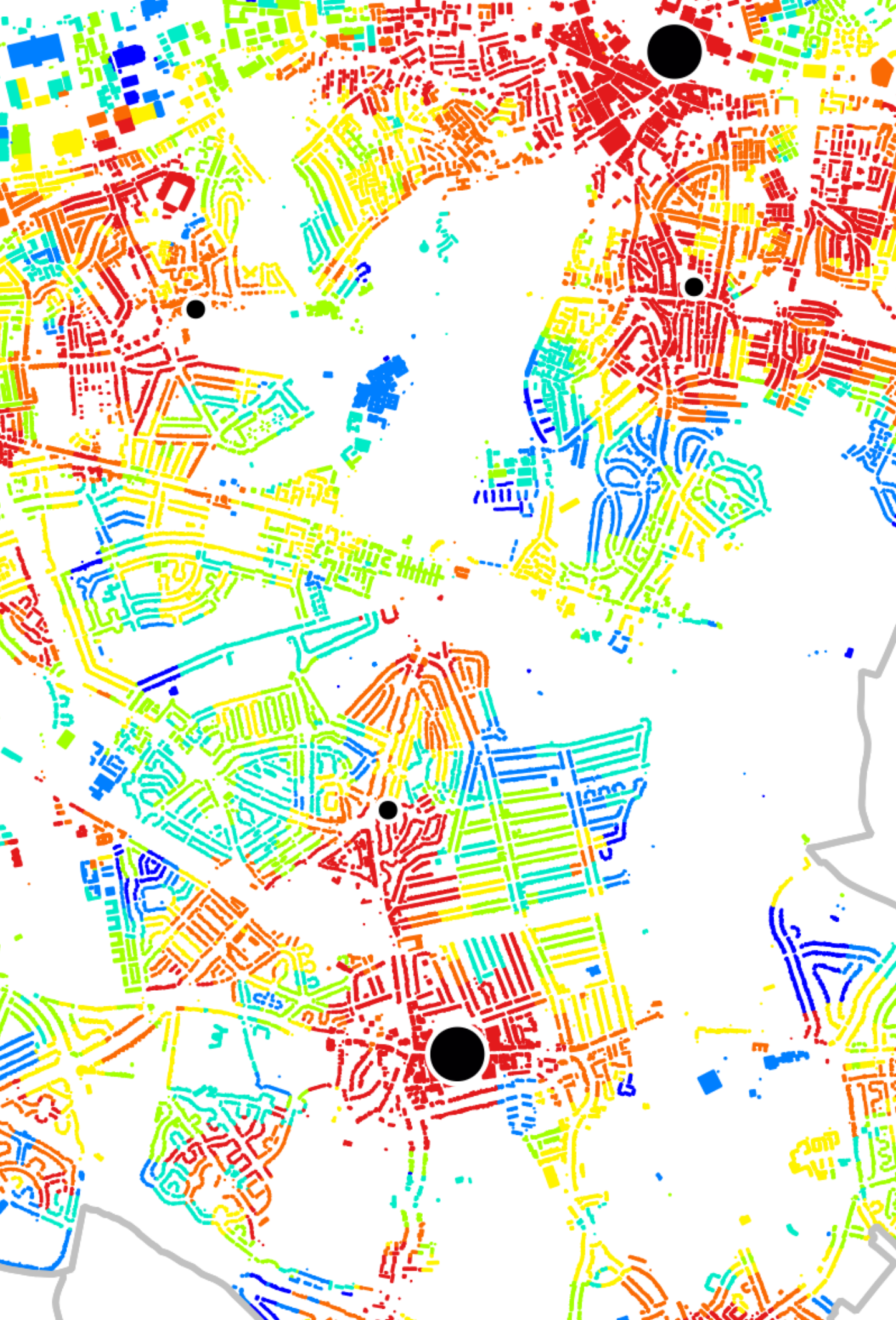
**Space connects or segregates; brings people into social and economic relationships or keeps them apart; helps people save time or consigns them to carbon-intensive lifestyles; enhances real estate value or damages investments; increases safety or encourages criminal behaviour.**

**Well designed spatial layouts produce safe and vibrant places and, in doing so, create enormous levels of social, economic and environmental capital. Poor layouts risk functional failure, loss of investment and social harm. The urban landscape is littered with failed development, much of it caused by misunderstanding how spatial layout affects human performance.**

**Space Syntax provides a trusted, evidence-based approach to the analysis and design of spatial layouts. We help people to see, in clear and straightforward terms, how buildings and urban places can be designed to optimise their human and environmental performance.**

Land use diversity analysis of Royal Borough of Greenwich. The degree of access to different amenities and their mix defines the character of an area by creating a more walkable and vibrant urban context.





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# **An evidence-based approach.**

# **A progressive paradigm for human-centred design.**





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