



Contents

Foreword	3
Introduction	5
Equity and Inclusivity	6
Engaging all senses in design	6
Repurposing golf courses	7
Floorspace for charities and SMEs	8
Re-imagining transit	9
Enhancing air quality through optimised traffic systems	11
Climate Change	12
Cool schools: transforming schools into cool urban green hubs	12
Transforming London's relationship with water	14
The River Thames as an artery for the circular economy	15
Activating London's waterways	17
Sensory SuDS: addressing flooding and mental health	18
Get in touch	19
Ideas for Future London project contacts	20



Foreword

London, with its kaleidoscope of cultures, rich history and diverse communities is truly unique. It is a place that many call home and is also a global centre of trade, commerce, innovation and culture. But what does the future hold for the city of London? What should London look like in the next 100 years and who should be involved in shaping it?



Paula Walsh UKIMEA Region Chair

auta Calan

These are the questions that we need to be asking now as an estimated 2 billion people around the world vote in elections over the coming year. In London and the UK, I see our upcoming elections as an opportunity for imaginative thinking and robust conversation. It is a chance for decision makers and those in positions of power to amplify the voices of others. In particular, the voices of the future – our young people.

This is exactly what we decided to do at Arup, through the Ideas for Future London competition. We know that our early careers members view and experience London differently and that they will be key to its future success. They bring a different perspective of the city and have unique ideas about London's future. The competition provided a platform for sharing these ideas and developing them into practical, deliverable solutions.

The ideas presented in this document are a sample from the finalists of the competition and the thoughts of senior members in Arup. They are just a glimpse into the innovative, original thinking that goes on in Arup, and in London, every day. Hearing the unique ideas and perspectives of our members was a powerful reminder of the importance of diversity of thought. New ideas and solutions already exist within our communities — we just need to hand them the microphone, step aside and listen. Imagine how much more inclusive London could be if we replicated this process in schools, retirement homes and places of worship. Imagine what our city could be like if it was truly shaped by the people that live in it.

I am extremely proud to present these ideas and celebrate those that created them in this publication. It is my hope that these ideas and solutions will inspire meaningful engagement for future leaders to elevate the ideas of all Londoners about the future of this city. With challenges like climate change, rising inequality, poverty and geopolitical tensions ever present, we need to do things differently. Only by embracing London's diversity and amplifying all voices will we be able to shape our city into a place that all of us feel proud to call home.





Introduction

The upcoming elections are an opportunity for Londoners to share their ideas about the future of the city. At Arup, we see this time as a window of opportunity for discussing about how we can address some of London's most pressing issues.

We held the Ideas for Future London competition to provide a platform for the ideas of Arup's early careers members. Arup has a diverse early careers cohort who have a different experience of London from our senior leadership. Our early careers members are Londoners facing rapid increases in the cost of living, experiencing the impacts of climate change and confronting global challenges around gender, race and equity. It is vital that their views and experiences are shared and their proposed solutions listened to.

We received ideas from multidisciplinary teams across Arup. Our expert jury included Debbie Jackson (Westminster City Council), Lucinda Turner (Greater London Authority and Transport for London), Martyn Evans (Landsec U+I), Angie Jim Osman (Allies & Morrison), Sowmya Parthasarathy (Arup) and Paula Walsh (Arup). The six shortlisted teams from the ideas competition then presented their ideas at a presentation evening. The winner's idea is showcased at the end of this publication.

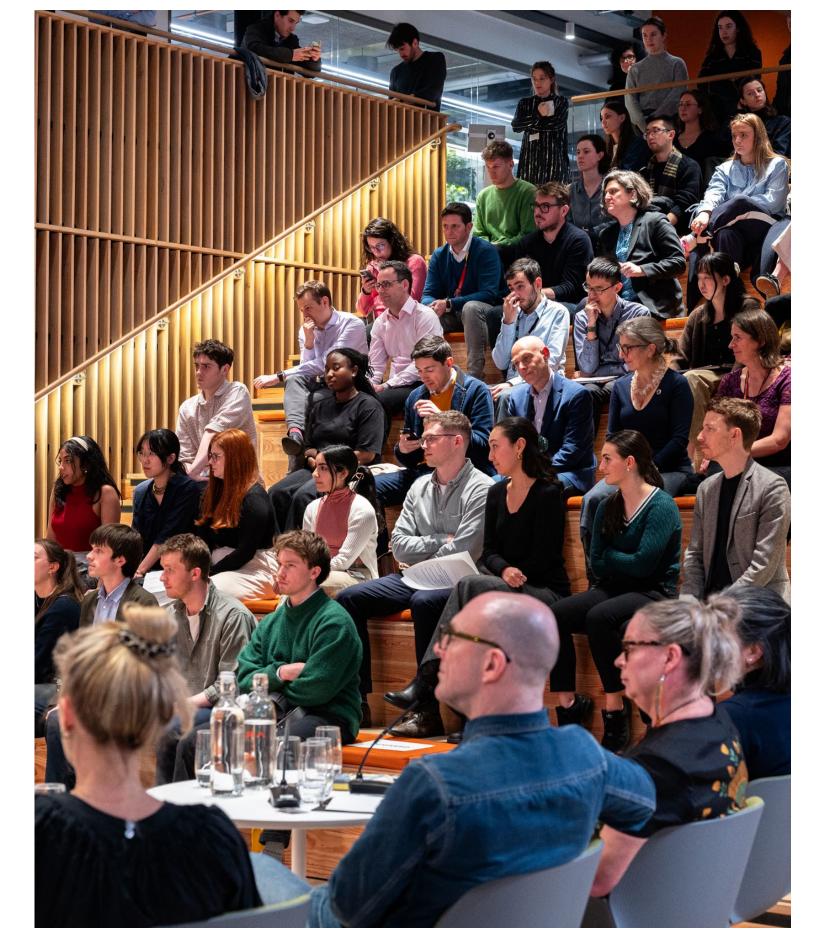
This publication brings together the ideas from the Ideas for Future London shortlisted teams and Arup's London leadership team. It shows the diversity of ideas that exists and highlights the importance of creativity when addressing London's biggest challenges.

In bringing these ideas together, it became clear that there was more to this competition than just producing ideas. Rather, the process itself – of hearing diverse perspectives and co-designing ideas – is fundamental to creating solutions that are equitable and effective. We learned from the competition that garnering the ideas of young people should happen all the time – both in organisations and more broadly, in wider political debate.

This publication speaks to the diversity of thinking within Arup. In particular, in the Arup early careers cohort. Many of the ideas put forward by early careers members focussed on community needs, health and well-being — building on the work Arup is already doing in these areas. It is clear that people were very much at the heart of the early careers teams' thinking.

Two key themes emerged from the ideas presented in this document: equity and inclusivity and climate change. The ideas presented respond to the issues of rising health inequality and the ever-present challenge of climate changes. Some ideas seek to create more sensitive urban environments for people with different abilities and needs. Others relate to the circular economy, reducing urban heat and improving the health of the environment. These ideas overlap, demonstrating that the solutions we use to combat climate change can and should also address rising inequality.

These ideas and the people that produced them are central to the future of London. What is truly inspiring, is that this is just the beginning.



Ideas for Future London Grand Final event, 2024

Engaging all senses in design



Design in London has traditionally been dominated by a single sense: sight. Yet, our everyday experience of places is captured by a lot more than just the way we see it, it is often based on multiple senses. London's constant evolution, with construction, development and change prevalent across the city, reframes the sensory landscape, resulting in new sensory emotional connections between users and places being created all the time. Research even suggests that human sensory experiences go beyond the traditional five senses – sight, smell, taste, sound, and touch – to include temperature, balance, pain and body awareness.

Competition runners up: Sixth Sense



Lydia Orsborn
Apprentice
Lydia.Orsborn@arup.com



Amanda Leow
Graduate Consultant
Amanda.Leow@arup.com



Alex Brook
Graduate Engineer
Alex.Brook@arup.com

Sixth Sense has identified a need for a multi-sensory design framework which should be implemented into current design processes in London. This framework flips the traditional paradigm of minimising impacts to the senses, by focusing instead on identifying opportunities to enhance specific senses and recognising the value of multi-sensory environments. Multisensory design brings a multitude of benefits relating to accessibility and inclusivity; improved mental health, with particular links to reducing depression; enhanced social interactions; a sense of belonging; and accessibility benefits, especially for those with vision impairments.

Built environment professionals across disciplines would be able to use the framework to improve design for all of society, from planners to architects, and consultants to engineers. The framework would provide a basis for more thoughtful designs, created to protect people and provide comfort and delight while walking, standing, sitting, talking or seeing. An example of this framework in action could be creating sonic refuges or promoting ecological soundscapes. This framework could allow us to experience the city differently, for example, by experiencing it through our feet – emphasising the importance of even pathways. It is our senses that bring our experience of London to life.

There is opportunity for this framework to re-structure thinking and ensure multisensory experiences are integrated into design processes. Collective action across disciplines will be needed to bring this framework to life – input from environmental psychologists, built environment professionals, local planning authorities and academics who understand design processes and urban experiences will be essential for delivery. Through collaboration, we can create a transformative framework for implementing multisensory considerations into our design processes, creating a more accessible, inclusive and engaging London.



The Sixth Sense framework would recognise the importance of engaging all the senses in the built environment. Image source: Slidesgo

Repurposing golf courses



London's golf courses occupy 17% of the capital's green areas yet are underutilised and inaccessible to diverse groups¹ – only 1.5% of the population uses them.² They also fail to maximise climate resilience and biodiversity benefits. 46% of London's golf courses are owned by local councils,³ which are most feasible to repurpose.⁴

MarMarUs initially presented a Community Improvement District (CID) model to finance the transformation of golf courses. The idea involved imposing levies on local businesses to cover some of the costs of repurposing golf courses, with the rationale that local businesses would benefit from the local regeneration. MarMarUs have subsequently revised their idea, taking greater account of the financial and political practicalities involved with repurposing London's golf courses.

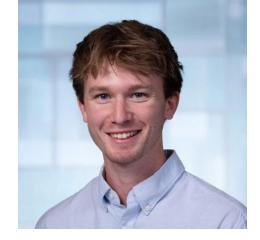
Competition finalists: MarMarUs



Henry Brooke
Graduate Marketing Coordinator
Henry.Brooke@arup.com



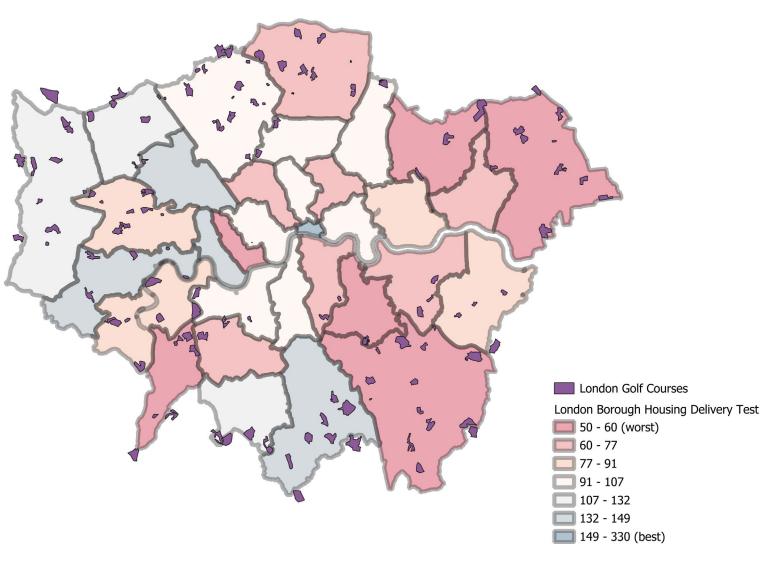
Ewan Bate
Graduate Consultant
Ewan.Bate@arup.com



Harry Hughes
Graduate Engineer
Harry.Hughes@arup.com

MarMarUs proposes integrating housing into repurposing initiatives. This would act as a strategic enabler for other interventions that provide public benefit (such as green and recreational space) while also ensuring developments comply with Green Belt or Metropolitan Open Land regulations.⁵ Providing housing would allow revenue generated from development to be directed towards transforming the remaining area of the former golf course into accessible green space for the community. This would however, require sensitive and considered delivery. Housing developments would need to be as dense as possible while also fulfilling sustainability requirements and being unobtrusive. The remaining area should be used to maximise benefits for the community, providing space for recreation, while serving as a biodiversity haven.

Repurposing of London's publicly owned golf courses could occur in two ways. One option is retaining some elements of the repurposed golf course, with the rest of the space being used for housing. The second option would involve re-developing the whole course, creating opportunities for more housing and more open green space. Whichever route is taken, MarMarUs feel that there is a significant opportunity to maximise the positive impact of these under-used courses, especially in the light of potential changes to planning regulations after the upcoming election.



London's golf courses mapped against the level of housing delivery in boroughs

References

Russell Curtis, 2021, The Golf Belt: How sustainable development on London's golf courses can help address the housing crisis, viewed 21 March 2024 https://golfbelt.russellcurtis.co.uk/

Statista, 2023, Number of people participating in golf in England from 2016 to 2022, viewed 21 March 2024, https://www.statista.com/statistics/899231/golf-participation-uk/

Russell Curtis, 2021

RCKa, 2021, The Golf Belt, viewed 21 March 2024, https://rcka.co.uk/golf-belt/

UK Government, 2012, National Planning Policy Framework, Protecting Green Belt land, viewed 21 March 2024, https://www.gov.uk/guidance/national-planning-policy-framework/13-protecting-green-belt-land>

Floorspace for charities and SMEs



Since COVID-19, London's office vacancy rate has risen to 8.6% in March 2023 compared to 5% in March 2020. In offices that are leased, attendance is focussed on a mid-week peak. Using this spare space creatively could bring benefits to the community and grow London's economy.

This idea proposes the creation of a network which connects businesses with spare floorspace to charities and small and medium-sized enterprises (SMEs) who need places to work. Doing so could support greater inclusion of these organisations while maximising the use of London's commercial real estate assets.

London's charity sector and SMEs are vital to the economy. The charity sector is responsible for helping support vulnerable communities while SMEs are foundational to London's economic growth. Many charities and SME's cite inability to access affordable space to meet and work as a significant barrier to their success.

Providing access to suitable workspace for charities and SMEs could greatly improve their ability to deliver benefits to London. This is already happening on a dispersed scale – Arup current rents out desk space to a charity and the City of London has buildings to rent for free to suitable organisations. Other platforms are already forming connections between firms and charities for ad hoc workspace use. However, this idea would focus solely on longer term affordable rental solutions for charities and SMEs.

This idea would aim to develop a widespread network of businesses with vacant floorspace and charities and SMEs who are looking for affordable workspace. This concept could operate as a 'commercial AirBnB' where firms could advertise available workspace and smaller firms and charities could select times to rent it out. Sharing spaces with other firms could bring co-benefits including increased networking and collaboration between different organisations. This idea could see London's offices used more efficiently while also making commercial real estate more accessible to charities and SMEs.



Spare floorspace in office buildings could be used to help charities and SMEs looking for places to work.

Leadership entry



Matthew Dillon
Director
Matthew.Dillon@arup.com

Re-imagining transit



London's public transport system is one of the busiest and most extensive in the world, serving over two million tube passengers and five million bus users every day. Despite this, public transport commutes can be a mentally and physically taxing experience. Common concerns relate to air quality, noise pollution, overcrowding and safety, with a recent report finding that only 44% of travellers feel safe on the tube.¹

So how can we make Londoners feel safer on public transport? The answer to this is greater transparency – providing travellers with more information so they can make informed decisions about their journey. Tube dust, including PM2.5 particles small enough to cause health concerns, is at far higher concentrations on the underground compared with other areas in London.² This is not commonly understood by travellers, given the lack of accessible data. By increasing monitoring of air quality in the underground and making real-time data available via the Transport for London (TfL) Go app, travellers will have the opportunity to plan their journey with air quality in mind. Richer data can also create a case for engineering works to increase ventilation on the underground.

To support travellers in making happier and healthier commuting choices, we need to understand their travel experience. Providing a mechanism in the TfL Go app for reporting travel experiences (including noise level, carriage occupancy, poor lighting, bad smells and uncleanliness) will provide a deeper understanding of user experience and a greater sense of passenger autonomy. This is particularly important for ensuring the underground and bus services cater for people of all backgrounds and abilities.

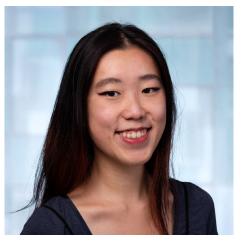
Competition finalists: SafeLink London – TfL Reimagined for all



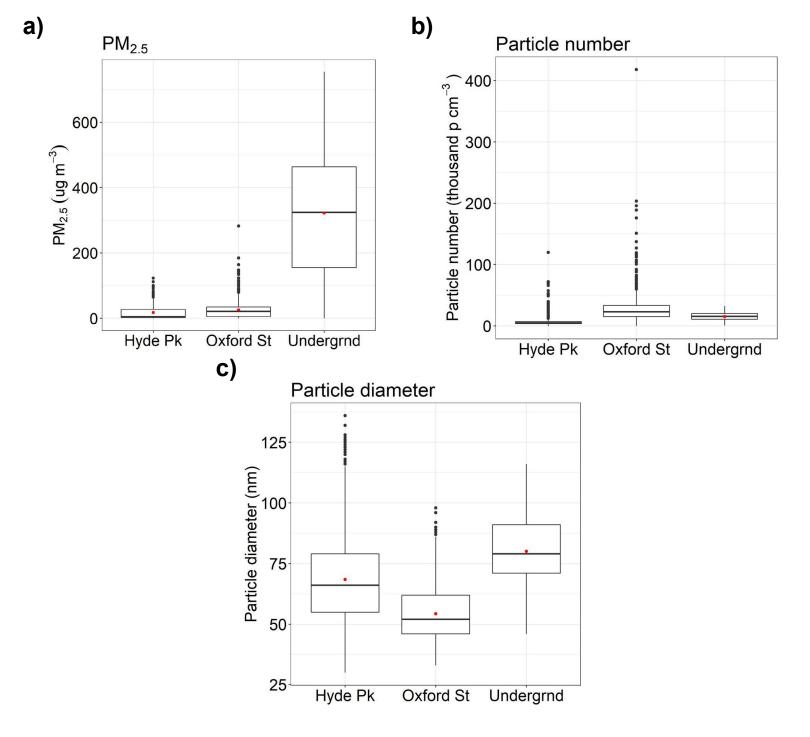
Angelica Sudharson
Graduate Engineer
Angelica.Sudharson@arup.com



Holly Farrow
Graduate Engineer
Holly.Farrow@arup.com



Emily Wang Graduate Consultant Emily.Wang@arup.com



Summary statistics for PM2.5 particle counts in London showing air quality on the tube compared to other parts of London. Image source: 2019 Smith et. al. Image source: 2019 Smith et. al.

References

YouGov London Omnibus, 2020

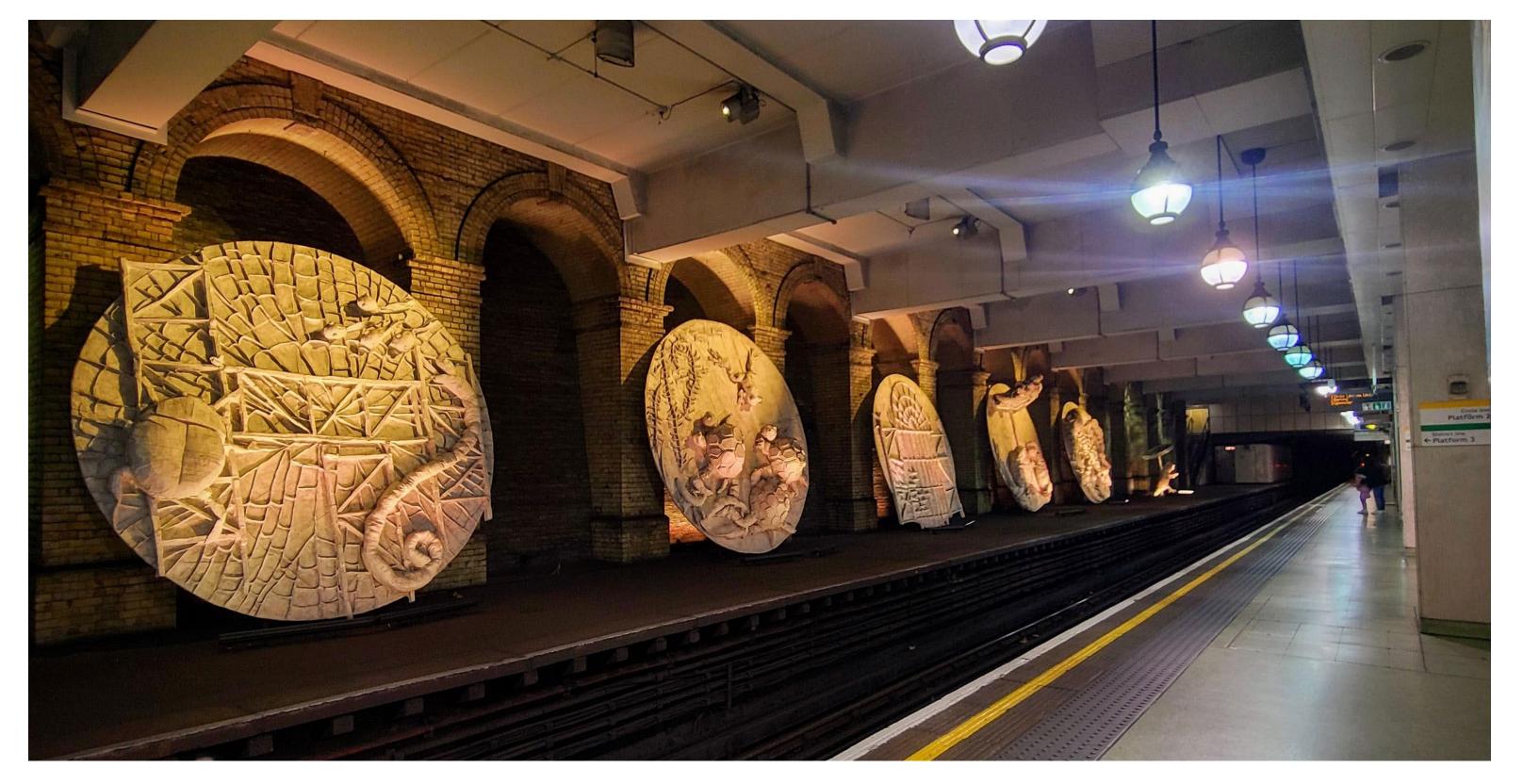
Smith JD, Barratt BM, Fuller GW, Kelly FJ, Loxham M, Nicolosi E, Priestman M, Tremper AH, Green DC. PM2.5 on the London Underground. Environ Int. 2020 Jan;134:105188. doi: 10.1016/j.envint.2019.105188. Epub 2019 Nov 28. PMID: 31787325; PMCID: PMC6902242.

Re-imagining transit



When we travel, we encounter different people and places – tube and bus networks are full of diversity. This should be celebrated to create a more exciting journey for all. There is significant opportunity to enhance the use of the TfL Go app for art and culture. A 'hidden London' map could be provided, showcasing station history and local culture. A busking timetable and information on artists in stations could be made available, platforming local artists and making journeys more enjoyable. Lastly, art should be showcased at bus stations and on the underground, with the TfL Go app mapping this and providing information about artworks.

These initiatives would make for healthier travellers who are more informed, have better journeys and a deeper connection with their community and local culture. People would feel safer and more empowered in their ability to choose how they travel on public transport in London.



Pond Life Albertopolis and the Lily Art Installation at Gloucester Road Tube Station by Monster Chetwynd © GG Archard

Enhancing air quality through optimised traffic systems



London has the challenge of poor air quality and sub-optimal traffic systems. These issues are interconnected – ineffective traffic systems exacerbate vehicle emissions, especially from heavy goods vehicles, by causing unnecessary stopping, idling and acceleration at traffic lights, especially during off-peak periods.

Team SCOOT proposes a solution to improve London's air quality by optimising traffic light signalling to help make traffic flows smoother and decrease emissions focusing on the off-peak period. Scoot's idea envisages innovative traffic signalling improvements to reduce emissions and make roads safer, improving air quality and travel experiences.

The main benefit of this proposal is that the system is already in place to transform. Relatively simple optimisations to the existing traffic signalling system is all that would be needed. These simple optimisations include reducing the traffic phase times to the minimum permitted period and allowing for a quicker cycling of traffic phases, reducing waiting times. This is a small investment that could deliver significant benefits.

Future improvements could include implementing flashing amber lights at major road intersections at off-peak periods. This would reduce unnecessary stopping and starting which exacerbates air pollution. DfT research has shown that flashing amber optimisation can reduce carbon monoxide emissions by up to 35%. Flashing amber lights would also encourage safer driving behaviours, with drivers using their intuition and driving slower. This proposal would also utilise the sophisticated data collected from traffic lights with Split Cycle Offset Optimisation Technique (SCOOT) capability in London in order to inform on future traffic changes.

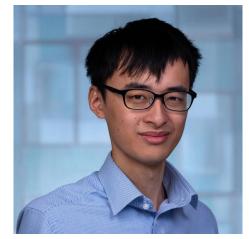
The proposal will need to consider challenges around ensuring the safe delivery of the project, driver behaviour changes, regulatory changes and engaging with cyclists and pedestrians to ensure road changes prioritise sustainable transport modes.

Team SCOOT proposed a systems-thinking approach to improving air quality through making simple changes to traffic signalling to enhance capability during the off-peak period. The benefits of this proposal will be felt from pollution reduction, reduced travel time and improvements to road safety throughout London.

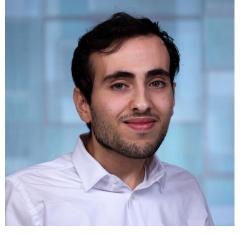


The SCOOT proposal could improve air quality by reforming London's traffic signalling system.

Competition finalists: SCOOT



Victor Ho Graduate Planner Victor-L.Ho@arup.com



Hassan Almortada
Graduate Planner
Hassan.Almortada@arup.com



Zarina Husain
Graduate Consultant
Zarina.Husain@arup.com

Cool schools: transforming schools into cool urban green hubs



Schools are one of the anchors of London's communities and neighbourhoods. They are places for communities to meet, learn, grow and cultivate community cohesion. In 2022, the UK government issued a national emergency in response to unprecedented temperature spikes, hitting a record 40.3°C in England for the first time. Children, especially very young children and those with special educational needs and pre-existing health conditions, are vulnerable to the impacts of climate change — in this instance urban heat.

London's schools and early years settings already suffer significant stresses from excessive urban heat. This is owing to increasing extreme weather and is exacerbated by inefficient and outdated buildings, excess hard surfaces and constrained resources and funding. Our Urban Heat Snapshot research shows that the temperature difference between the hottest and coolest spot in London can be up to 7°C. Central to this difference is the absence of trees and shading, which are proven and effective climate adaptation solutions to the urban heat challenge.

Last year Arup developed tailored climate adaptation plans (CAPs) for 60 schools as part of the Greater London Authority's (GLA) Climate Resilient Schools (CRS) programme. In consultation with schools, we made a series of recommendations for improving schools' resilience such as introducing shading, nature-based solutions and rainwater harvesting systems.

The single most recommended measure across the school CAPs was solar shading, a low-intervention measure to reduce solar gains in buildings and provide cool spaces in playgrounds to shelter during hot weather. Shade structures can be relatively inexpensive, flexible and modular, made from sustainable materials and complemented by tree planting.

The CAPs work also highlighted the potential for schools to become hubs for urban cooling in their neighbourhoods. Implementing shading structures could be an affordable first step towards creating cool schools. The next step could involve pairing this with urban greening measures such as tree planting, sustainable urban drainage and increasing permeable surfaces. Together, these measures would reduce urban heat and deliver co-benefits such as reduced flooding, biodiversity and health improvements. Urban greening interventions could have a spill-over effect and spread to neighbourhoods beyond the school boundary through the creation of Cool School Streets. Streets leading to schools could become corridors for green infrastructure and support active travel – increasing the safety, health and well-being of children and their caregivers.

We see an opportunity for the GLA to roll out widespread delivery of shading and greening measures across London schools, drawing on learnings from the CRS' SuDS rain planters programme and prioritising those that are most vulnerable to urban heat. This programme would benefit from economies of scale and aggregated procurement, potentially acting as a pilot for a wider UK cooler schools programme.

Leadership entry



Dima Zogheib
Associate Director,
dima.zogheib@arup.com



Ali Poncia
Senior Climate Change Consultant
ali.poncia@arup.com

Cool schools: Transforming Schools into Cool Urban Hubs





Through urban cooling interventions, schools could become cool urban hubs in neighbourhoods around London.

Transforming London's relationship with water



London's relationship with stormwater is troubled – concrete dominates the built environment, there is a lack of greenery and water infrastructure endures extreme stress during heavy rain events. The city's flat and impermeable topography makes it prone to flooding, resulting in large puddles and overburdened pipe systems. This leads to widespread ponding which reduces pedestrian accessibility and increases the risk of accident and injury.

It does not need to be this way – there is an opportunity to bring nature back into the city, improving biodiversity and air quality while highlighting London's surface water network instead of hiding it.

Competition finalists: Green and Blue London



Emily Pearson
Graduate Engineer
Emily-G.Pearson@arup.com



Sersha Barry Graduate Engineer Sersha.Barry@arup.com



Victoria Akroyd
Graduate Engineer
Victoria.Akroyd@arup.com

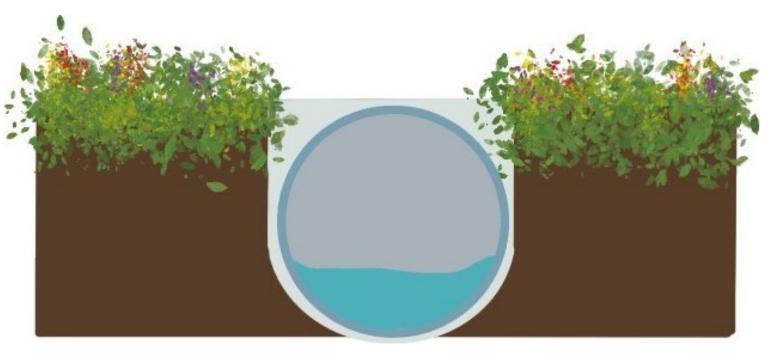
A city-wide transparent pipe network is proposed to make water resources visible to Londoners while also irrigating urban greenery. The pipe network would run along the exterior of buildings, collecting rainwater and distributing it to green roofs, walls and for indoor use. This system would increase water retention times during heavy rainfall events, provide external attenuation, improve system capacity and minimise the impact of flooding. Water costs and carbon savings will be achieved and pressure on local infrastructure would be reduced. Opportunities to grow food on green and vertical roofs would offer a means for community-centred local food production.

This initiative is not without its challenges – there are potential fire hazards associated with adding combustible materials to building envelopes and the system would be at risk of tampering and vandalism. These could be addressed by ensuring adequate irrigation, installing water quality meters, limiting green wall height, providing even breaks between green roofs and providing internal access points for maintenance.

This strategy offers a simple and feasible solution for sustainable water management in London, with multiple benefits for people and the city. The next steps for this idea could include pilot projects in boroughs suffering from overburdened pipe networks and a lack of urban greenery.

Rolling this out across London would provide widespread benefits – reducing surface water run-off, increasing water supply and sustainability, improving the health of Londoners and strengthening their relationship with nature. This idea would ultimately increase London's resilience, health and future-proof the city in the face of climate change.





A city-wide transparent piping system could be implemented to make water systems more transparent for Londoners and deliver a range of benefits.

The River Thames as an artery for the circular economy



The River Thames, a historic artery of commerce and transport through London, has the potential to play a pivotal role in the city's transition towards a circular economy. This idea involves a transformative approach to waste management, leveraging the river's infrastructure and projected reductions in waste volumes to promote sustainable delivery systems and a circular economy.

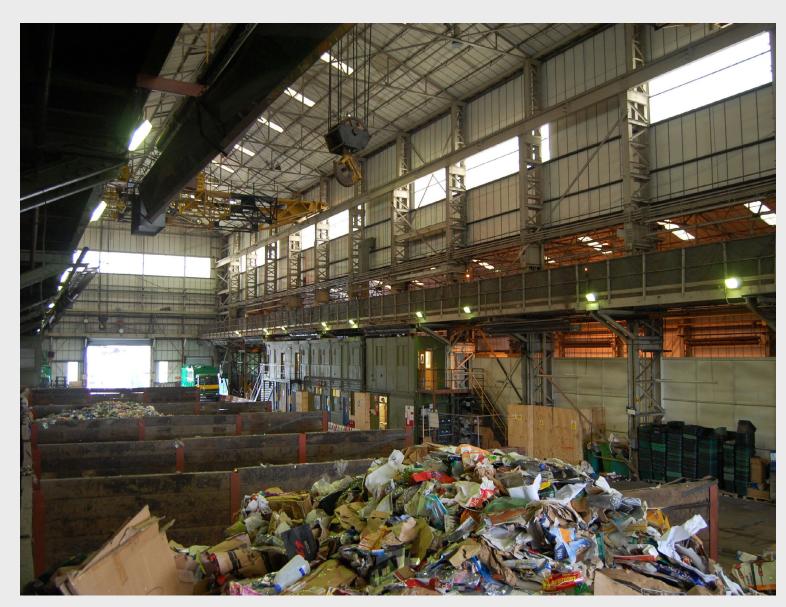
years. One city-wide target is to send no biodegradable or recyclable waste to landfill by 2026. Another is to increase the percentage of municipal waste recycled to 65% by 2040 (a significant increase from 29.9% in 2020/2021). There is strong direction to reduce waste, increase recycling and turn what is left into low carbon energy. These anticipated changes present an opportunity to rethink London's approach to waste management and logistics.

London's waste generation is expected to decrease in the coming

The River Thames is a thoroughfare for barges transporting waste from the city to waste transfer sites along the river's edge. Currently, barges used for transporting waste return empty to the city; a linear and inefficient process. Instead, imagine a system where barges, after offloading their waste, are used to transport other goods on their return journey. These journeys could form a vital part of London's supply chain — reducing emissions from transport inefficiencies, addressing congestion and contributing towards creating a circular economy. In addition to this, there is an opportunity to rethink the long-term use and function of the strategically located waste transfer sites along the River Thames as London's waste volumes reduce. As the demand for waste infrastructure decreases (as a result of reductions in waste produced), how could these waste transfer sites be better used to support a more circular economy in London?

The implementation of this vision would require substantial support, including central and local government grants and stronger policy direction. Such funding and policy could drive forward ambitious plans for waste management and shape a more circular city.

The history of barge movements on the Thames, from importing bricks into the capital to exporting manure to surrounding farms, serves as a reminder of the river's enduring role in London's economy. Today, as we aim towards achieving a circular economy, these barges could once again become symbols of sustainable exchange.



North London Waste Refuse Centre

References

Mayor of London, n.d., Waste and recycling, viewed 10 April 2024,

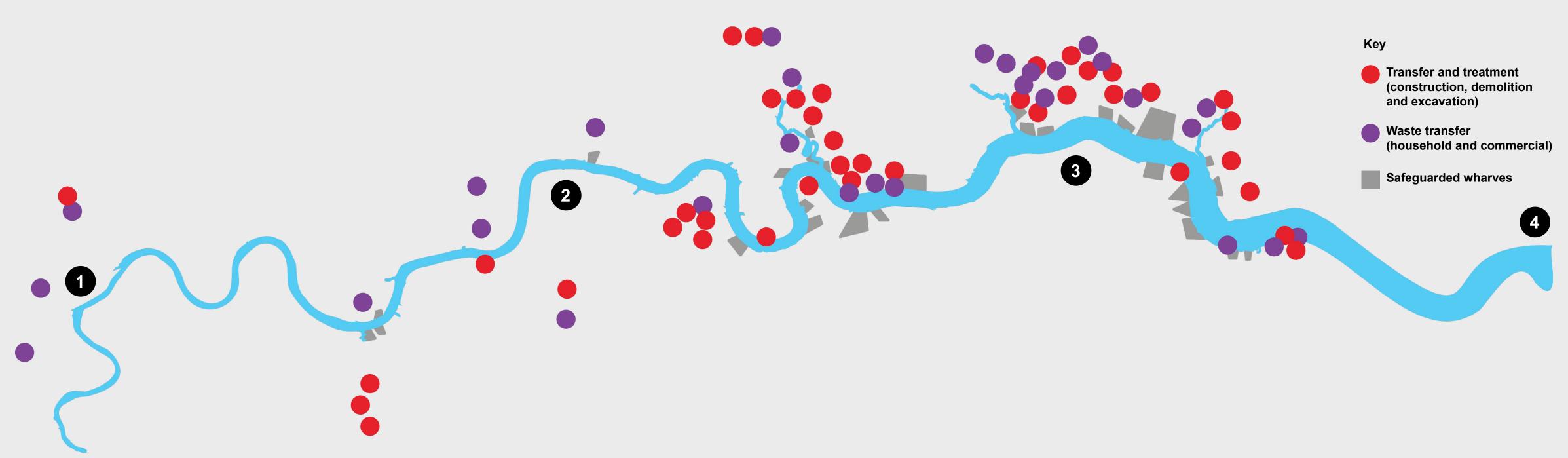
Leadership entry



Ben Glover
Resources Business Leader
Ben.Glover@arup.com

The River Thames as an artery for the circular economy





- 1. The Thames is home to several waste transfer locations in London, as shown in the map above. These sites, strategically located along the river, serve as crucial nodes in London's waste management network. However, their potential extends beyond waste processing they could become integral components of a circular economy.
- 2. Imagine a system where barges, after offloading waste at Waste-to-Energy (WtE) and waste transfer facilities down the river, return upstream with deliveries for London's residents. Instead of returning empty, these vessels could become a vital link in the city's supply chain, reducing road congestion and carbon emissions.
- The transition towards a circular economy also invites us to reimagine our waste transfer methods. Could we replace traditional waste trucks with underground waste transportation systems or electric or hydrogen-powered vehicles? WtE facilities, with this excess power, could produce hydrogen for such vehicles.
- 3. The implementation of this vision would require substantial support, including central and local government grants and stronger policy direction. Such funding and policy could drive forward ambitious plans for waste management and shape a more circular city.
- 4. The River Thames, with its rich history and strategic infrastructure, offers a unique opportunity to advance London's circular economy. By transforming our waste management practices and embracing innovative delivery systems, we can create a more sustainable and resilient city.

London's waste transfer facilities are places of potential transformation and exchange as we move to a more circular economy.

Activating London's waterways



London's waterways could play a central role in increasing access to green space and improving community well-being. Other cities around the world use their waterways and the spaces around them as public space, for active travel networks and for hosting events and celebrations. Yet, many of London's waterways lack a sense of purpose and many Londoners lack access to green space and safe active travel networks. This idea seeks to celebrate London's waterways by making them more accessible and an integral part of the city.

Leadership entry



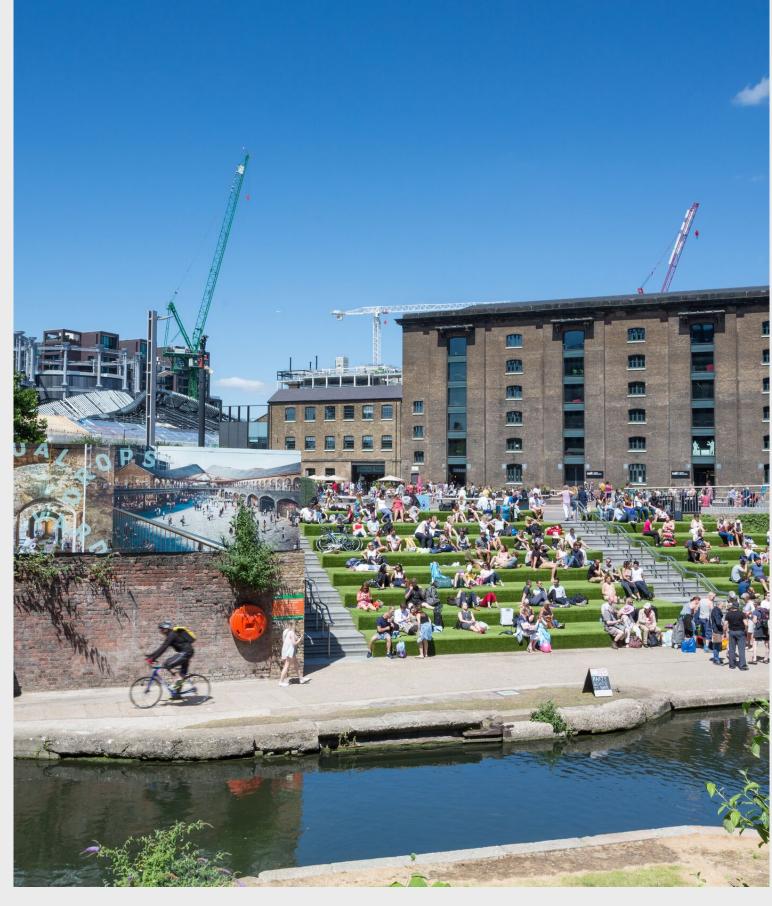
Phoebe Davey
Sustainability Consultant
Phoebe.Davey@arup.com

Currently, London has turned its back on many of its waterways. Along the River Thames and areas of London's canal system, there are a number of spaces with limited public access to the waterfront. Narrow, dark and under-developed towpaths line many of the canals throughout the city. Private properties front onto waterways, cutting off the public access and opportunities for enjoyment of the waterfront.

Creating mechanisms to unlock and rejuvenate the places along London's waterways could transform the city. Mapping waterways with the greatest potential for improvement and identifying communities where access to public space and active travel paths is limited could target solutions to deliver the most public benefit.

We propose to use London's waterways as spaces for recreation, linear parks, growing food, exercise and hosting events. Businesses could activate spaces along rivers and canals. Low-cost floating homes could be deployed on rivers and canals to increase housing provision, while also bringing life to the waterways. Green corridors could be developed to serve as recreational spaces, as well as wildlife hotspots. Regenerating the paths along the waterways would make them safer and more accessible for a broader range of users.

This idea would require collaboration with multiple waterways authorities, trusts and private landowners. However, the benefits of celebrating London's waterways would be widespread. This initiative would increase the community's ability to access public space, housing, and active travel options, while also regenerating London's unique places along its rivers and canals for nature, as well as its people.



London's waterways could be transformed into new green spaces, transport spines and provide opportunities for floating uses.

Sensory SuDS: addressing flooding and mental health



Surface water flooding in London is a major risk. Floods are getting more frequent and intense, threatening London's critical infrastructure.

London also has a mental health crisis with more than 2 million Londoners experiencing poor mental health. This is especially pronounced in London's most deprived boroughs. Using co-design methods, London can proactively improve flooding responsiveness and enhance the emotional wellbeing of Londoners through its built environment.

SensorySuDS proposes urban interventions located at busy places in the city which integrate multipurpose healing spaces with Sustainable Drainage Systems (SuDS). These interventions create restorative hubs that strengthen the local community, while supporting people to find relief and regain mindfulness. These urban interventions would provide a moment of respite for users in the city.

SensorySuDS promote emotional and psychological wellbeing by offering users a space to rest and engage their senses in an inner 'sensory garden'. It also integrates nature-based SuDS systems to combat flooding through a flood-resistant outer garden.

SensorySuDS are envisaged to be co-designed by bringing together the lived experience and lived expertise of the community and professional expertise of designers to tailor the space to different community needs. A range of methods could be used to engage the most vulnerable populations to provide input on what would make SensorySuDS work best for them. Communities would have a say in where interventions happen and the concept behind any proposed SensorySuDS.

This project would aim to engage both private and public sector actors to help strategise where these interventions would work best and determine funding mechanisms. Health, education and transport stakeholders could also be engaged to understand where SensorySuDS could be deployed for maximum benefit.

SensorySuDS are a new kind of integrated, restorative urbanism that puts London's mental health crisis and growing risk of flooding at the heart of urban design. Through co-design, SensorySuDS would make sure that any solutions are designed for and with Londoners, working together towards the improvement of the city and the communities that live there.

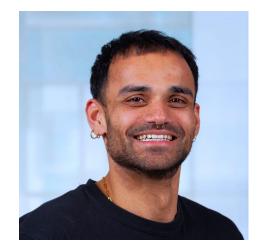


The SensorySuDs proposal showing an integrated multipurpose healing space and sensory garden.

Ideas for Future London competition winners: SensorySuDs



Tafadzwa Lumeyu
Designer
Tafadzwa.Lumeyu@arup.com



Luke Evens
Graduate Consultant
Luke.Evens@arup.com



Sophie Liu
Experience Designer
Sophie.Liu@arup.com



Get in touch

We hope you enjoyed reading these ideas. We challenge you to think about your vision for the future of London – what would you like to see in our city in 100 years? What would you like to see change and why?

We will continue to develop these ideas within Arup and draw from the expertise and experience of our diverse team. Our clients, partners and stakeholders will be central to this process. If you are interested in any of the ideas presented in this document, feel free to get in touch with the project team or the contacts listed against each idea.

At Arup, we know that we are strongest when we work together – across portfolios, grades and backgrounds. It is this diversity that makes us equipped to respond to the pressing challenges of climate change and rising inequality.



Sensory SuDS, the Ideas for Future London winning team
Pictured from left to right: Luke Evens, Tafadzwa Lumeyu and Sophie Liu



Ideas for Future London project contacts

Project Director



Jo Negrini
Director
Jo.Negrini@arup.com

Project Managers



Ashleigh Ngow Graduate Consultant Ashleigh.Ngow@arup.com



Kate Field
Graduate Planner
Kate.Field@arup.com

ARUP

Dedicated to sustainable development, Arup is a collective of 18,500 designers, advisors and experts working across 120 countries. Founded to be both humane and excellent, we collaborate with our clients and partners using imagination, technology and rigour to shape a better world. And we are passionate about the difference we can make to people, businesses and the environment in London, the United Kingdom and the world.

Please contact our team or london@arup.com or reach out to us on <u>Twitter</u> or <u>LinkedIn</u> to continue the conversation.