

ThinkStation summary report

Engaging stakeholders in Network Rail's
competition brief for a future passenger hub

June 2020



ThinkStation

Your ideas for a future passenger hub

Supported by



About Design Council

Design Council's mission is to make life better by design. We work with people to create better places, better products and better processes, all of which lead to better performance.

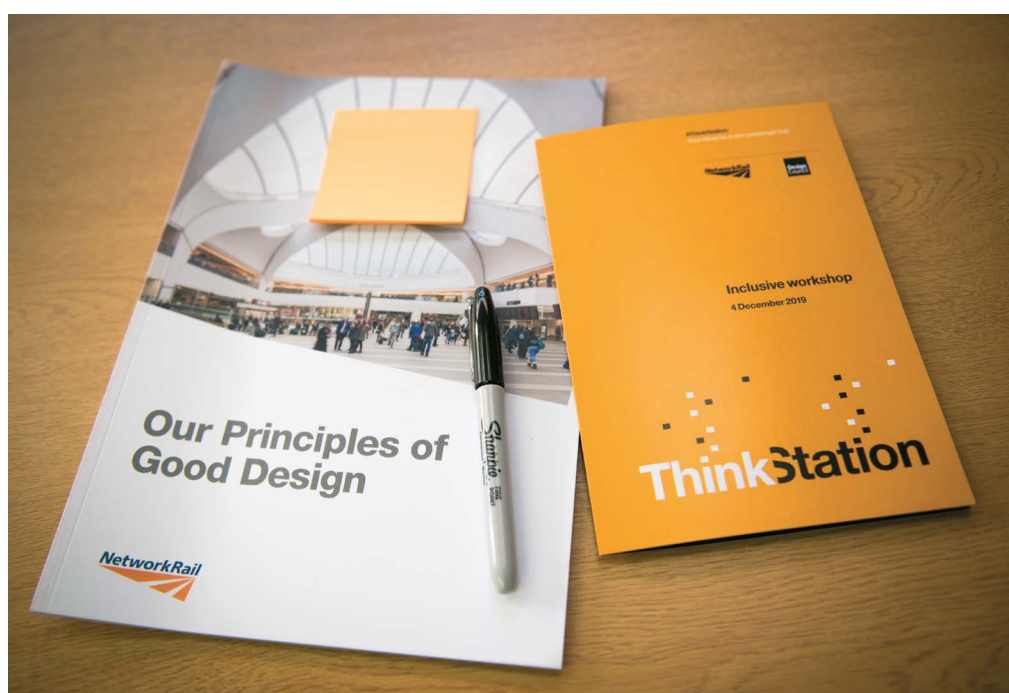
We commission pioneering evidence-based research, develop ground-breaking programmes and deliver influencing and policy work to demonstrate the power of design and how it impacts three key areas of the economy: business innovation, places and public services. We bring together non-designers and designers – from grassroots to government – and share with them our design expertise to transform the way they work.

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Aylesham Station, Category E

D

Medium sized stations

Staffed

0.25-0.5 million trips
per year

298 stations across Britain

E

Small sized stations

Staffed

Under 0.25 million trips
per year

679 stations across Britain

F

Small sized stations

Unstaffed

Under 0.25 million trips
per year

1,200 stations across Britain



Wood Street Station, Category D



Corby Station, Category E



Goostrey Station, Category F

Images © Luke O'Donovan

Background

Network Rail is set to launch an international design competition in 2020 for small to medium stations across Great Britain. The design competition will call for future station designs that can be integrated in smaller urban and rural contexts. Network Rail's ambition is to raise design quality across its network as well as recognise and respond to the evolving civic role of infrastructure. As such Network Rail is looking to expand what a station could be and has opted to use the term 'passenger hub' throughout this report. This ambition is accompanied by an acknowledgement of the climate and environmental emergency, and recognition that the built environment, including the rail industry, has a significant part to play in responding to this.

Currently, across Great Britain, the design quality of large, medium and small stations varies greatly. Larger stations, particularly in large cities and towns, tend to be better designed and managed, and offer a wider range of facilities and amenities. Smaller stations much less so. By improving the quality of smaller, suburban stations, there can be increased parity across the network of stations. In a recent customer survey commissioned by Network Rail, the need for improved station design quality was highlighted by passengers and users of the rail network.

Rail enables people to connect and supports the economy and livelihoods of local communities across Great Britain. And the travel experience of rail users is extremely important to Network Rail. In 2019 there were over 1.8 billion rail passenger journeys in Great Britain. Passengers' daily lives and experiences are shaped by these journeys: from the stations where people depart and arrive, to the trains they travel on, to the spaces they pass through and the mobile apps navigating these connections.

In Great Britain rail stations are classified into six categories based on passenger trips per year, ranging from A to F. Small to medium stations are identified as D, E and F. Of Network Rail's 2,500 stations, approximately 80% – over 2,000 stations – are classified as small to medium stations.

In late 2019 Network Rail commissioned Design Council to undertake passenger and stakeholder engagement to help them understand their priorities before they developed the brief for the design competition. This engagement, subsequently entitled ThinkStation, was delivered across 11 workshops in four major British cities – London, Manchester, Bristol and Glasgow, between November 2019 and January 2020.

In the report to follow, Design Council provides an independent summary of the findings from ThinkStation to help shape the Network Rail and RIBA competition brief as well as support Network Rail in improving design quality across their network.



Foreword



Sue Morgan

**Director of Architecture and Built Environment
Design Council**

Good design enriches everyday life. Infrastructure has the potential to positively impact the lives of millions of people and significantly improve the quality of the surrounding spaces, through economic renewal, social enhancement and environmental restoration. It provides benefits to the wider community, businesses, and public and third sector organisations. We have provided independent design advice to Network Rail since 2017, helping to instil a culture that prioritises good design.

ThinkStation is an excellent example of how a single, real-life project can prompt a wider, design-orientated cultural shift. It demonstrates an organisational willingness to do things differently and an eagerness to listen to and enact change.

Design Council would like to express our warm thanks to Network Rail for the opportunity to be involved in this project which has the potential to enhance design quality across the rail network. We would like to thank everyone who participated in ThinkStation. Their bold ideas and collaborative approach enabled them to play a vital part in designing for the benefit of current and future generations.



Anthony Dewar

**Professional Head of Buildings and Architecture
Network Rail**

Network Rail provides critical infrastructure to people across Great Britain, including over 2,500 stations. While some of these stations are located in large cities, most are in suburban and rural environments. Providing this infrastructure is a great privilege as well as an incredible opportunity to improve the lives of millions of people every day. In creating the next generation of railway stations, we want to put passengers and stakeholders at the heart. That is why we commissioned Design Council to deliver ThinkStation.

This report makes a compelling case for collaboration and cross-disciplinary working. It envisions stations that value communities, connectivity and stronger placemaking. We are committed to advancing this vision by upholding the priorities put forward by stakeholders as well as enacting recommendations made by Design Council. We will do this by embedding this report into the upcoming station design competition brief, highlighting the nine stakeholder priorities and using them as a basis for the evaluation framework.

I am delighted by the invaluable insights that we've gained throughout this process, and look forward to seeing how these will influence the future of our small and medium sized stations.

Executive summary

The ThinkStation workshop series was commissioned by Network Rail, Great Britain's rail infrastructure provider, and developed and delivered by Design Council, who provide independent advice to improve the quality of places and infrastructure as a core part of their work.

The series brought together Network Rail's stakeholders and offered a platform to share their insights and ideas on stations and the processes through which new stations are designed, planned and delivered. In the report to follow, Design Council provides a summary of these insights along with recommendations to Network Rail, as well as opportunities for the wider rail industry to prioritise human-focused design. These recommendations should be taken on board as Network Rail develops the design competition for Britain's new passenger hub.

This report also outlines the process undertaken by Network Rail and Design Council to deliver the workshop series as well as its wider impact. It is hoped that by doing so we can document a unique undertaking within the rail industry and encourage other organisations to engage more meaningfully with the people who will use and be impacted by the places, services and products they create.

Headcorn Station, Category D



To provide practical and clear advice to Network Rail and relevant consultant teams developing the competition brief, the insights from ThinkStation are summarised under three categories:

- Priorities for designing a future passenger hub
- Using the learning and recommended next steps
- Strategic advice for Network Rail and the rail industry

The 'Priorities for designing a future passenger hub' section of this report is a result of consolidation and analysis of the entirety of the workshop series. Through this process we have identified nine key priorities which embody the main concerns, challenges and opportunities discussed by over 320 participants at the workshop series. These priorities reflect the type of station those involved in or impacted by the rail industry are hoping to see come forward.

The next key step for Network Rail, identified in the 'Using the learning' section of this document, is to embed the identified priorities into the competition brief and competition's evaluation framework to ensure the process and outcomes embody stakeholder priorities. We suggest that competition participants strongly consider and embed these priorities into their future station visions.

We encourage Network Rail and the rail industry to continue championing good design and apply design thinking in all that they do. This will help to ensure that places, services and products can meet the needs of the people who will use them as well as ensure that the social, economic and environmental potential for infrastructure is reached.



Denham Golf Club Station, Category F

11
workshops

324
attendees

120
organisations

4
cities

35,000
post-its

London
Bristol
Manchester
Glasgow



Glasgow



Bristol



London



Manchester



Outline of ThinkStation workshops

ThinkStation was delivered through 11 workshops in four major cities in Britain – London, Manchester, Bristol and Glasgow – between November 2019 and January 2020.

Inception		
Identity	London	November 2019
Collaborative	London	November 2019
Innovative	London	December 2019
Connected	Manchester	December 2019
Inclusive	Manchester	December 2019
Contextual	Bristol	December 2019
Passengers	Bristol	December 2019
Heritage	Glasgow	January 2020
Community	Glasgow	January 2020
Sustainability	London	January 2020
Golden Thread	London	January 2020
Consolidation		
Brief development		
Competition Launch		

Our approach

ThinkStation was designed with collaboration, knowledge sharing and innovation in mind. The workshops offered the opportunity to explore the social, environmental and economic challenges facing infrastructure in Great Britain, whilst enabling participants to envision future passenger hub designs. They facilitated open and fluid dialogue between participants on the competition brief whilst developing specific priorities, building consensus and drawing on industry expertise.

ThinkStation workshops were shaped jointly by Network Rail's vision and Design Council's methodology:



- **Network Rail's Principles of Good Design** – each workshop focused on one of Network Rail's **Principles of Good Design**, posing the question – what would a future passenger hub be if it embodied that principle? For example, what would be the characteristics of an identity focused passenger hub and how could it be designed?
- **Design Council's framework for innovation** – a methodology, including the Double Diamond design process (see Appendix 1). Through this process, Network Rail and stakeholders were asked to take a step back from jumping to solutions and instead focus on ensuring the right challenges are being explored. The framework for innovation is explained in more detail in Appendix 1.

Using this framework, Design Council delivered and facilitated 11 one-day design workshops. The first 10 ThinkStation workshops followed a near identical agenda but were approached through the lens of each principle. The workshop was split into three main sections: providing stimulus, creating a platform for ideation, and promoting ways to envision future scenarios.

The final workshop, entitled 'golden thread', summarised key findings from the previous workshops and delved into existing processes involved in station design, including engagement, procurement and programming.

Design Council delivered these workshops alongside some of our 450 Built Environment Experts and Design Associates. We thank them for their contribution in shaping the series.

Following each workshop, Design Council undertook consolidation activities to review and analyse the themes and ideas generated through the activities.

Stimulus Seminar with keynote speaker		→	Presenting learnings, thoughts and experience on the workshop theme/principle in relation to stations and/or the competition brief.
Ideation Defining the design parameters through workshop activities	Exploring the design principle	→	Interrogating the meaning of the design principle to inform the design of the future passenger hub, the competition brief and evaluation framework.
	Stakeholder mapping	→	Identifying who might use future passenger hubs to define user groups and illustrate the broad scope of users See Appendix 2 for full list.
	Investigating future trends	→	Encouraging delegates to think about future behaviours that could influence the design of new stations.
Envisioning Designing the future passenger hub		→	Providing participants the opportunity to bring together the day's ideas as well as their expertise to envision what they feel the passenger hub of the future should embody.

Keynote speakers

Each ThinkStation workshop commenced with a seminar that provided stimulus, context and helped set the tone for the following workshop session. The seminars included a diverse range of keynote speakers from a variety of professional backgrounds. They helped create an atmosphere of genuine challenge, exploration and excitement, but were intentionally non-prescriptive. Speakers presented their professional and personal observations and experiences as well as case studies of organisations that have undertaken similar transformative projects. The full list of ThinkStation speakers, in order of workshop date, is below.



Tim Dunn
Railway Broadcaster
and Transport Historian
Identity Workshop



Hannah Barham-Brown
Disability and Gender
Equity Advocate
Inclusive Workshop



Christina Sinclair
Heritage Advisor
Heritage Workshop



Dr Nicola Spurling
Lecturer,
Lancaster University
Sustainability Workshop



Tom Armour
Director,
Arup
Collaborative Workshop



Adam Brown
Founding Director,
Landolt + Brown
Contextual Workshop



Pam Warhurst CBE
Co-founder,
Incredible Edible
Community Workshop



Hilary Carty
Director,
Clare Leadership
Golden Thread Workshop



Usman Haque
Creative Director,
Umbrellium
Innovative Workshop



Lucy Musgrave OBE
Founding Director,
Publica; NIC Design Group
Contextual Workshop



Delia Barker
Programmes Director,
Roundhouse
Community Workshop



Jim Eyre
Founding Director,
Wilkinson Eyre
Golden Thread Workshop



Hanif Kara
Director,
ATK II; NIC Design Group
Connected Workshop



Xavier Brice
CEO,
Sustrans
Passengers Workshop



Jennifer Crook
Head of Diversity
and Inclusion,
House of Commons
Sustainability Workshop

Attendees

Stations are taking on an increasingly multifaceted social, economic and environmental role within communities. To help ensure the next generation of passenger hubs fulfils this potential, ThinkStation aimed to bring together a cross-section of individuals, organisations and industries to approach this design challenge from a multitude of angles. Over 120 organisations attended from across the design and rail industries as well as community sector, other infrastructure and transport organisations, central and local government departments, and representatives from business groups.

Rail

- Network Rail
- Tocs
- Regulatory bodies
- Government bodies
- Government departments
- Heritage groups
- Community groups

Design

- Architecture
- Urban design
- Landscape architecture
- Engineering
- Graphic
- Wayfinding
- Inclusive
- Technology
- Modern methods of manufacturing

Government

- Local authorities
- Central government
- Agencies
- Combined authorities

Civic

- Community groups
- Third sector
- Arts
- Education, students
- Education, academics

Commercial

- Business groups
- Retail
- Media
- Public relations

Non-rail transport

- Air
- Highways
- Cycling





Insights



Priorities for designing a future passenger hub

Following the completion of the ThinkStation workshops in January 2020, Design Council extensively reviewed and analysed the ideas generated across the series. Through this process we were able to identify themes that bridged across workshops and build a consensus of the key priorities put forward by passengers and industry stakeholders. We have identified nine priorities which stakeholders feel should guide the design, development and procurement of the passenger hub of the future. The priorities are ordered by the frequency in which they arose across the workshops.

The next generation of passenger hubs should:

- | | |
|---|---|
| 01 Support existing and new communities in their local area | 06 Be welcoming and facilitate inclusive travel |
| 02 Reflect and embody local character and heritage | 07 Support and better integrate cross modal transport |
| 03 Provide consistent quality of space and service | 08 Help to address climate change |
| 04 Establish connections with and between the town centre and/or the high street | 09 Ensure longevity by accommodating changes of use, capacity and trends |
| 05 Celebrate and improve the quality of green spaces and open spaces and/or provide access to them | |

“The phenomenal opportunity of this generation is to think about the generosity and social programmes that could be within and outside of stations.”



Lucy Musgrave, speaker, ‘contextual’ ThinkStation



Support existing and new communities in their local area

01

A well-designed building or public space is not enough to create attractive and active places; people are needed to enliven and embolden them. Overwhelmingly and consistently, the theme of ‘community’ arose across the ThinkStation workshops. ThinkStation participants envisioned physical spaces that support local activities and initiatives that strengthen or reinstate a shared sense of community. Workshop participants were eager to explore how civic bonds could be strengthened amidst socio-economic and technological changes.

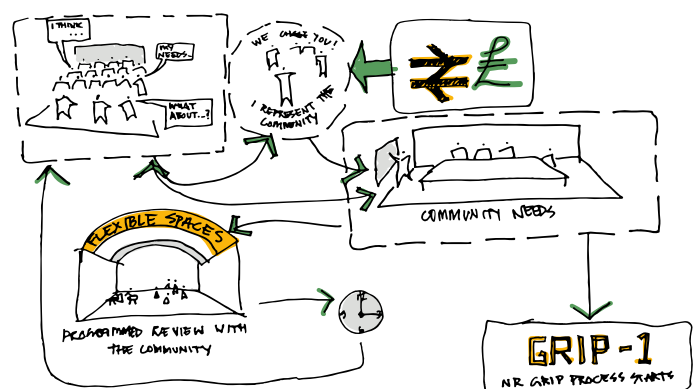
Passenger hubs should reflect uses and services that correspond to local needs, helping to embed stations within the fabric of their communities in which they sit. This could include spaces that benefit from shared and circular economies such as flexible workspaces, community amenities such as crèches and GP drop-in centres. Assistance and preference for local businesses, community driven uses as well as hiring local staff and contractors would also contribute to civic resilience.

Designated spaces should be consistently provided to facilitate community uses and services. The programming, management and ownership of these spaces should be developed through community engagement. Several different types of social spaces and interventions were envisioned at the ThinkStation workshops, ranging from community shopfronts to a ‘chatty’ bench for passengers and non-passengers alike. To deliver meaningful civic infrastructure, project teams should work with local stakeholders from the earliest possible stages, integrating professional expertise with local insight.

In summary

- Identify gaps in local servicing needs and build any potential offering into an early project plan.
- Prioritise spaces and businesses within passenger hubs that align with identified needs.
- Engage with local stakeholders and partners to understand community needs and opportunities early on.
- Explore different management and ownership models in the design and delivery of the future passenger hub.
- Promote shared and circular economies for sustainable living.
- Create opportunities for social interaction and provide designated open civic spaces.
- Aid / give preference to local business, hire local hub staff and prioritise local contractors when possible.

Delegate vision: the locally sourced station, ‘community’ ThinkStation, 24 January 2020



At each workshop delegates were challenged to create their own vision of a future passenger hub. The following pages include some of the drawings that were created at the workshops.

Understand and embody local character and heritage

02

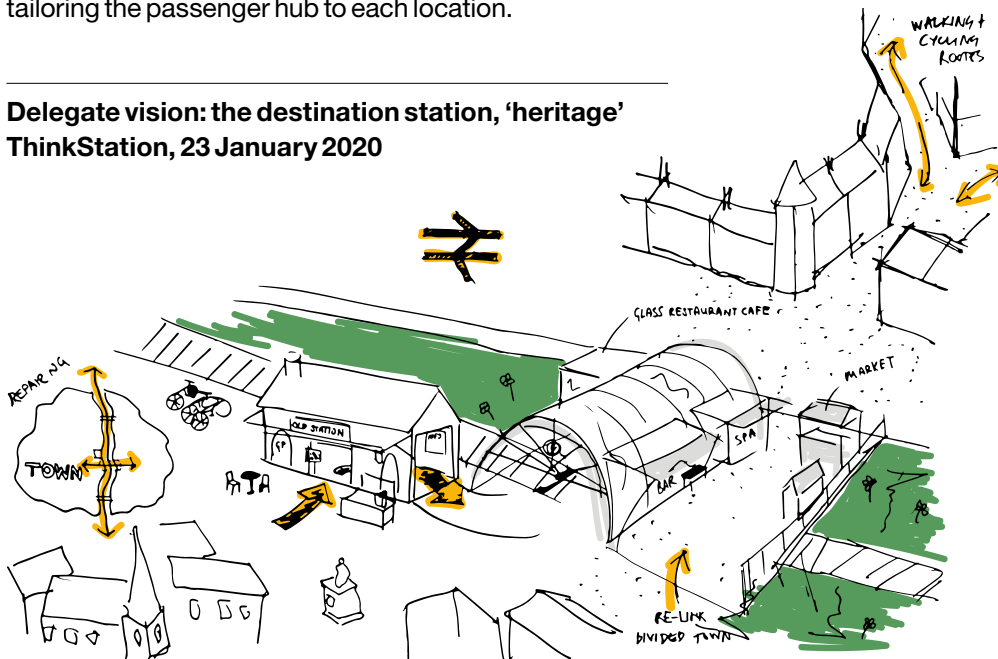
A passenger hub should be and appear specific, embodying and enhancing distinct characteristics, cementing a relationship with locality and creating a sense of place. What exactly this means in design terms will vary from location to location and project to project. However, the shared first step is for a project team to understand the aspects that make a location unique, increasing awareness of character and heritage, and then to design in response to this analysis and understanding.

At ThinkStation, participants understood and were largely open to the benefits of modular design, discussing how and if stations could be simultaneously modular and contextually responsive. Workshop participants were not supportive of the idea of replicated designs and the complete absence of specificity, creating 'anywhere' places. Potential solutions that were raised included 'kit of parts' or 'station pattern books' that could benefit from economies of scale and a consistent identity whilst tailoring the passenger hub to each location.

In summary

- Undertake analysis of the surrounding context at the beginning of each project to better understand the potential of the site.
- Promote better integration of the future passenger hub's uses, buildings and connections with the local area.
- Explore how the passenger hub could enable the town or local area to enhance their identities whilst not overly competing with the town centre and/or high street.

Delegate vision: the destination station, 'heritage' ThinkStation, 23 January 2020



Provide consistent quality of space and service for passengers

03

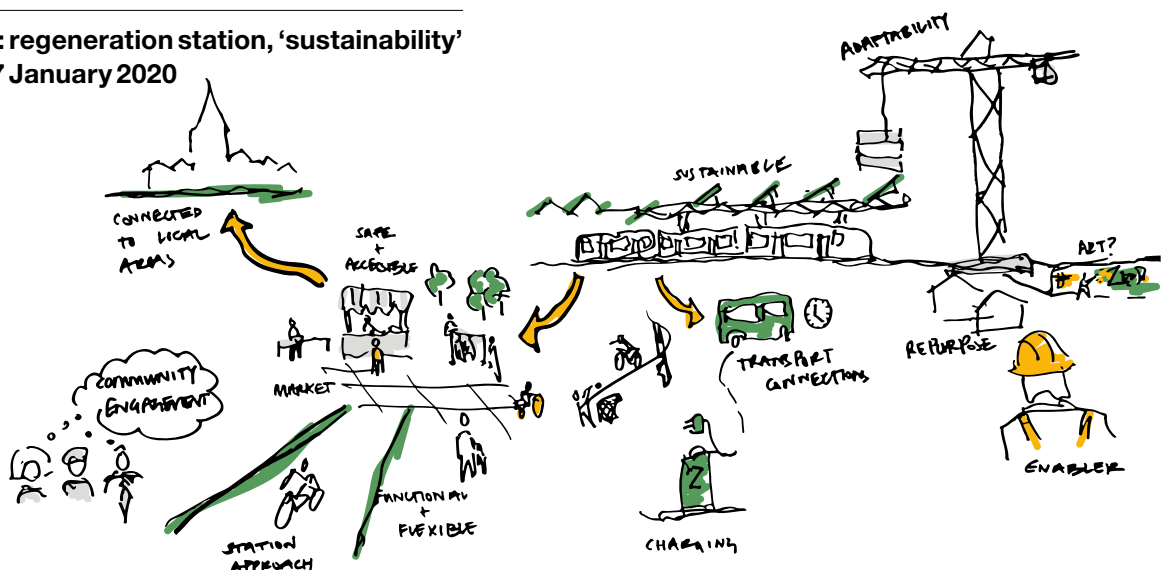
Consistency enables passengers to plan their journeys, reducing anxiety and stress as well as increasing satisfaction. While the reliability of train services is paramount, there is also a desire for comparable station environments and station-based services. The baseline expectation is that all passenger hubs provide basic, functioning and well-maintained amenities such as shelter and toilet facilities. However, participants sought parity between stations of a similar size as well as along a route. There should be a clear set of standards that clarifies what passengers can expect from each type of station and route. A hierarchy of passenger needs should inform these standards, outlining requirements in relation to varying station types and sizes.

Currently, stations are categorised, based on annual passenger trips, into six categories ranging from A to F (see page 4). These categories don't account for how passengers perceive, use and move between stations. Alongside the competition for a future passenger hub, the station categories warrant interrogation as to whether there is a more suitable and intuitive categorisation system.

In summary

- Establish baseline standards for each station group and/or route.
- Explore the extent to which modular designs could adapt to specific contexts.
- Ensure stations, amenities are well-maintained through intuitive building design and an effective management service.
- Ensure service information is displayed, easily visible, legible and up to date.

Delegate Vision: regeneration station, 'sustainability' ThinkStation, 27 January 2020



Establish connections with and between the town centre and/or the high street

04

The current design of stations is typically inward facing, often complicated by railway lines, harsh fencing and gates that can sever the station from its surroundings. Passenger hubs should be a continuation of the public realm, town centre and/or high street, promoting permeability, forging strong connections and creating new relationships with the existing landscape and built environment. At ThinkStation, some participants envisioned the physical site of the future passenger hub. Many of these participants explored building enlarged bridges to house the passenger hub above the railway line. While perhaps not always feasible, the principle of connecting communities instead of separating them is paramount. The workshops suggested that the future passenger hub should help to reduce physical and social barriers and encourage design teams to think creatively about site layouts, building design and uses.

In summary

- Prioritise public, physical connections across the railway.
- Consider the wider community and stakeholders beyond the red line throughout the design process.
- Reduce physical barriers in passengers hubs to allow greater transit and non-transit movement.

Delegate vision: design for smaller unmanned stations, 'community' ThinkStation, 24 January 2020



Celebrate and improve the quality of green spaces and open spaces and/or provide access to them

Ecologically diverse landscapes should be prioritised in built developments. When well considered and designed, landscapes can support social, historical and ecological sustainability by providing civic amenity, enhancing local character and strengthening natural habitats. Most passenger hubs envisioned at the ThinkStation workshops included green spaces. The workshops highlighted that, in a time of increasing urbanisation and privatisation, softer, green environments should feature more strongly in new developments. Ecology and landscape will vary from location to location and thus a comprehensive area analysis is needed to ensure the future passenger hub responds meaningfully and effectively to the needs and characteristics of its context.

For some, green spaces raise concerns surrounding cost and maintenance. However, the significant value these spaces bring to the whole life cost of projects through enhanced ecological and environmental resilience as well as people's increased health and wellbeing should be considered and prioritised. How-to guides on creating durable, low maintenance landscapes that reflect local ecology could be collated/created and shared to increase industry and organisational knowledge.

Delegate vision: station for all, 'innovative' ThinkStation, 27 November 2019



In summary

- **Meaningfully integrate the natural landscape, planting and biodiversity. Examples include greening within the station and providing new habitats for wildlife.**
- **Understand local ecology and landscape character.**
- **Provide public green spaces where possible.**
- **Consider how to disseminate best practice for creating maintainable and ecologically significant landscapes.**



Green infrastructure is multi-functional – it provides protection from climate change, shade, shelter, flood storage, biodiversity, and creates conditions that support better mental health and recreation for physical health. These services are all essential for quality of life and climate change resilience.”



Tom Armour, speaker, 'collaborative' ThinkStation

Be welcoming to all passengers and users, facilitating inclusive travel

06

All passengers should benefit from the same station experience. This includes offering services to meet additional needs as well as catering to the greater cultural diversity that characterises most areas across Great Britain today. Diversity was viewed across the workshops in the broadest sense – ranging from cultural and religious practices as well as physical disability and invisible disabilities such as anxiety. An inclusive passenger hub would go beyond accessibility to provide an environment which can be used safely, easily and with dignity by all. It should be convenient and welcoming with no disabling barriers and enable independent use without undue effort, separation or special treatment for any group of people.¹

Collective learning, sharing and training to understand the diversity of passenger needs is essential to enable project teams to make empathic design choices.



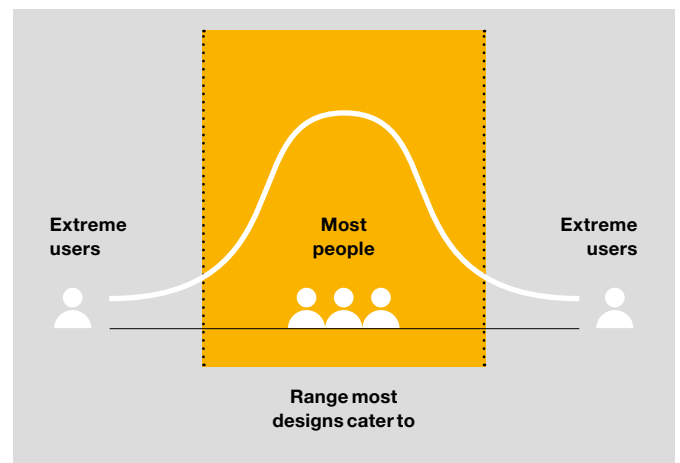
Inclusivity is often interchanged with ‘accessible’ but to me it’s so much more than that – being inclusive is not about being accessible. Accessible should be a given. Being inclusive is the next level up. Inclusivity is about feeling welcome, about feeling that I’m equal and most importantly about not feeling different.”



Hannah Barham-Brown, speaker, ‘inclusive ThinkStation

In summary

- Provide comprehensive service and station information so passengers can plan their journeys according to their needs.
- Identify and design around the needs of extreme users so that Network Rail can ensure new passenger hubs are inclusive, future proofed and everyone is catered for.
- Ensure front of house staff are cognisant, understanding and trained in additional needs.
- Broaden understanding of passenger needs.
- Provide project teams with the tools to understand the diversity of passengers and their needs.



The needs of extreme users should set the parameters of design to ensure spaces and services are inclusive.

¹ Inclusive Environments. Design Council. [Online – available at inclusive.designcouncil.org.uk]

Support and better integrate cross modal transport

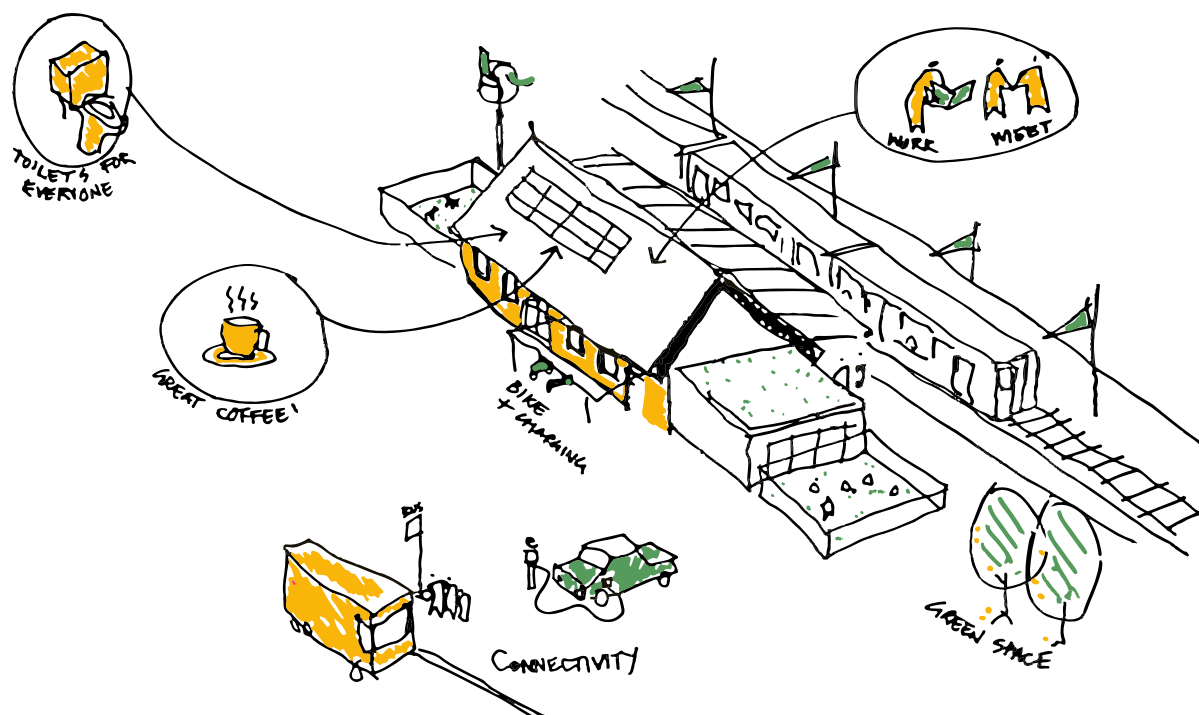
07

Rail transit is only part of a door-to-door journey, and participants shared a desire for greater integration between multi-modal transport, enabling smarter decision making and more seamless travel. This type of movement requires easy access to accurate transport data. Increased data processing capacity and communication between modes should be prioritised in the next generation of passenger hubs. Additionally, stations should facilitate multi-modal links, particularly for public transport, pedestrian and cycling routes, making it as easy as possible to reduce car use. The need for cars in remote areas is acknowledged and, where necessary, greater focus on the treatment and integration of car parking is needed.

In summary

- Integrate data sharing and communication systems between transport modes.
- Ensure network capability to adapt to expanding data requirements.
- Prioritise links with other sustainable modes of transport at stations.

Delegate vision: the commuter-unity hub, 'heritage'
ThinkStation, 23 January 2020



Help to address climate change

08

Climate change is one of the most significant challenges facing our society, requiring strategic, national leadership to implement meaningful environmental action. ThinkStation highlighted that these national and global challenges should be met with urgent action and, where necessary, by re-evaluating the way that stations are planned, built and managed. Procedures and processes that prioritise the reduction in greenhouse gases and work towards decarbonisation should be encouraged. This includes consideration of construction methods that prioritise low impact materials and manufacturing processes as well as local supply chains and sustainable energy sources. Sustainable design and management practices such as Sustainable urban Drainage (SuDs) should be a basic requirement of all station design.

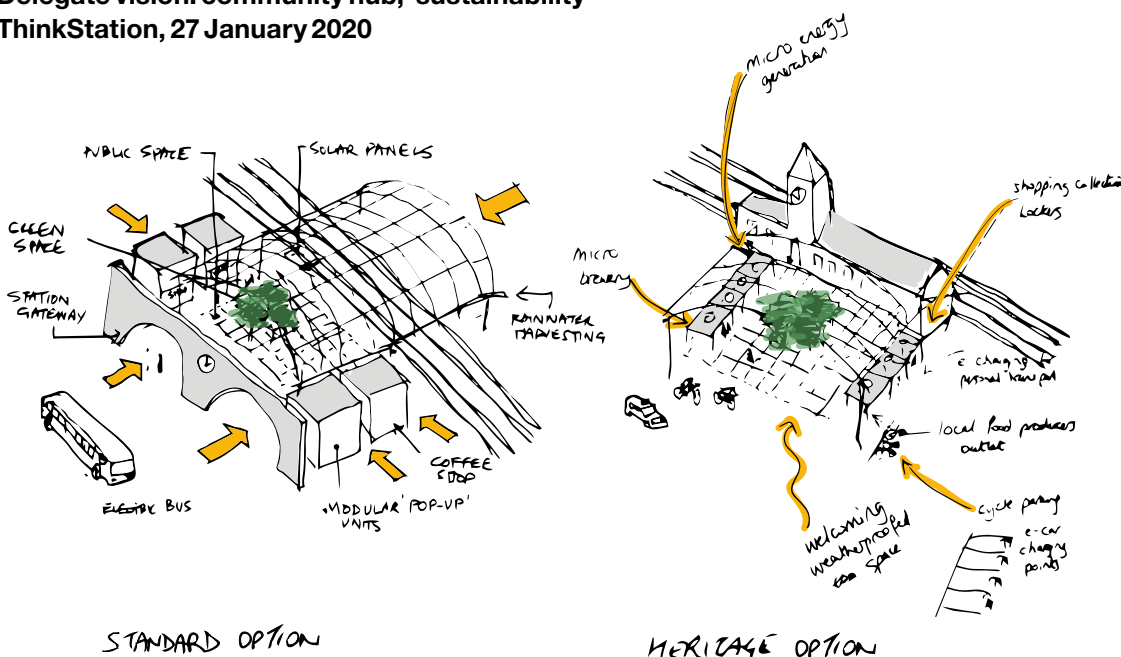
This approach should be complemented by critical climate action policies at a strategic level across Network Rail (see page 34) and through national guidance.

In summary

- Implement procedures that align with wider decarbonisation standards and aspirations.
- Prioritise local supply chains and low impact materials.
- Utilise sustainable energy supplies.

Delegate vision: community hub, 'sustainability'

ThinkStation, 27 January 2020



Ensure longevity by accommodating changes of use, capacity and trends

09

Stations are generational buildings that should be in place for over 50 years. It is currently difficult to predict the direction of technological, societal and environmental change, and subsequently, passenger hubs should prioritise long term flexibility and adaptability. Research^{2,3} suggests that the key future trends to impact the rail industry will be:

- Aging population
- Urbanisation
- Climate change
- Technology (for passengers and freight)
- Reduced natural resources
- Sharing economy

Across the ThinkStation workshops, there was an overwhelming focus on the social changes, such as shifts in the work and travel behaviours largely brought on by the sharing economy. These trends require the provision of spaces that enable flexible uses and programmes over time. The workshops also highlighted the need for technology and facilities to support day-to-day life, such as easy parcel drop off and collection, charging points for cars or phones, and reliable wi-fi connections.

The reduction in the availability of natural resources and energy increases the need to ensure all new development is designed and built for the long term. It is essential to understand the whole life value rather than just the immediate project cost of infrastructure. High-quality design can decrease long-term management costs and elongate overall built life.

The locally sourced station, 'community' workshop, 24 January 2020

² Rail in the future transport system, Williams Rail Review, DfT. May 2019

³ Future of Rail 2050, Arup. May 2019

In summary

- **Ensure passenger hubs, and the network to which they belong, are adaptable for new technology that facilitates efficiency, comfort and convenience. Technology should always work towards a human-centred service.**
- **Improve storage and digital facilities, for products and goods when travelling, deliveries, and also energy charging and Wi-Fi hubs.**
- **Promote and use more sustainable energy sources.**
- **Explore opportunities for a self-sufficient and economically sustainable passenger hub, for example through means of advertising, retail, etc.**
- **Interrogate the future use of ticketing systems and barriers in the design of the future passenger hub.**

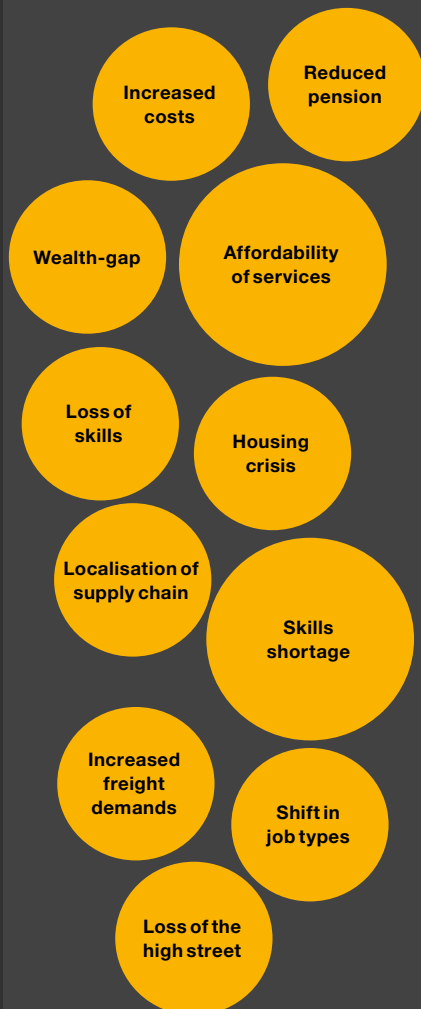
See overleaf for a diagram showing the critical concerns of industry delegates identified across the workshops.



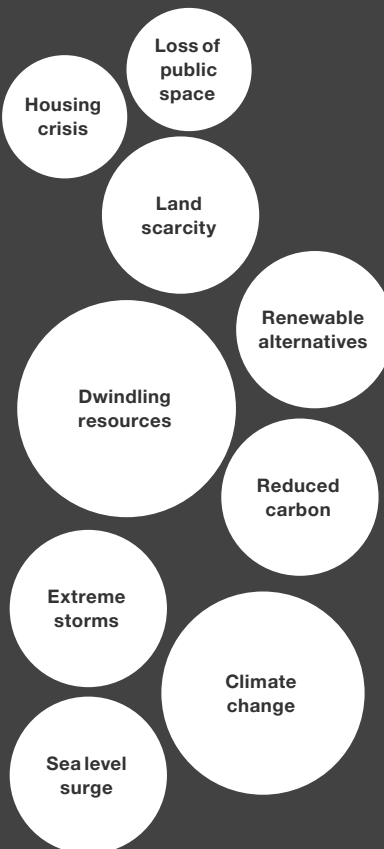
Future trends impacting rail identified by
ThinkStation workshop delegates



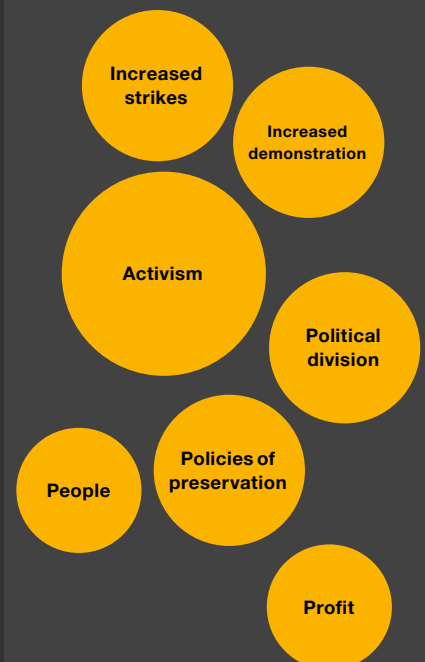
Economic



Environmental



Political





Using learning and recommended next steps

ThinkStation presented a remarkable opportunity to understand the needs and wants of users in the earliest possible stages of design development. Below we have summarised how these findings could be used by both Network Rail in developing a competition for the design of new stations and competition applicants.

Whilst originally developed for a new station design competition, the learning from the ThinkStation workshops should be applied beyond this. The themes of the stakeholder feedback – such as community, climate change, flexibility, contextuality – are applicable to development in general. We encourage the wider built environment industry to consider how these lessons could be applied to their work.

-
- | | |
|---|---|
| 01 Embed stakeholder priorities for a future passenger hub, identified through ThinkStation, into the competition brief and evaluation framework | 04 Continue to engage local communities and stakeholders |
| 02 Foster design exploration and innovation through the competition stages | 05 Be robust about inclusivity in the competition brief and throughout the process |
| 03 Encourage a strong vision and measure the merits of the proposal against that vision | 06 Explore alternative ownership and management models |

01

Embed ThinkStation's priorities for a future passenger hub into the competition brief and evaluation framework

The nine priorities identified for Network Rail's future passenger hub are generated from participants across 120 organisations with interests in and responsibilities for Britain's railways. Through this significant stakeholder undertaking, Network Rail is tasked with exploring if, how and to what extent ThinkStation's priorities are embedded in the competition brief. We strongly encourage Network Rail to embed these priorities into the competition brief, using them as criteria for the design of the future passenger hub. The more engrained these priorities are in the competition brief, and the process through which submissions are judged, the more likely it is that the future passenger hub will represent the stakeholder feedback at ThinkStation. We encourage the project teams entering the competition to strongly consider these priorities as they prepare their submission.

02

Foster design exploration and innovation through the competition stages

ThinkStation suggests that the passenger hub of the future challenges our current view of stations and red line boundaries of stations, and how they are managed and used. As such, we encourage Network Rail, alongside the RIBA, to encourage creative design thinking through the competition stages, particularly at the initial stage. The first competition call should encourage applicants to challenge their preconceptions about stations and where those red line boundaries lie. In the later competition stages, a more detailed, technical proposal can be fine tuned and developed.

At ThinkStation, prototyping and pilot projects were seen as opportunities to also help reduce value engineering at the construction stage. We suggest Network Rail explores how the next generation of stations could be prototyped in the initial stages of design development as well as continually iterated through implementation. Allowances in the brief, competition and construction processes, and funding should allow for prototyping, iteration and appropriate sharing channels and toolkits.

03

Encourage and reward strong vision and measure the merits of the proposal against that vision

ThinkStation encouraged workshop participants to create a vision for their future passenger hub. This simple but key aspect of the envisioning exercise proved to be critical in developing ideas and fostering design innovation, not simply technical adherence. The vision communicated how the design of the passenger hub uniquely catered to the needs of select users, contexts and circumstances. For example, the 'training station: getting you back on track' envisioned a passenger hub for society's most vulnerable people – providing employment opportunities to local people as well as facilities for charities and support services. As part of the competition submission, we suggest that design teams develop an overarching vision for their passenger hub. What is it that makes it special? How will passengers experience the spaces and services?

04

Continue to engage local communities and stakeholders

We suggest that Network Rail continues to engage stakeholders and communities, both within the competition process and thereafter. Community engagement could be a specific requirement of the design approach, encouraging applicant teams to use these skills and develop their designs with engagement in mind. A how-to guide for navigating through Network Rail and the rail industry's processes, key stakeholders and systems, particularly suggested at the Golden Thread workshop, would be greatly beneficial. Joint feasibility studies and masterplans between Network Rail, housing developers and local authorities were suggestions put forward.

05

Be robust about inclusivity in the competition brief and throughout the process

Network Rail and the RIBA should consider ways to promote inclusivity in the brief and throughout the competition process. This includes, but is not limited to, encouraging smaller firms, and mixed and diverse teams from different professional backgrounds to enter the competition, such as artists, landscape designers and heritage experts. This will help to ensure that the design of the new passenger hub is more holistic, considering social, physical, economic and environmental factors.

The judging process – like the competition brief and future passenger hub design – should also be inclusive, bringing in people from different age and socio-economic groups, ethnicities, religious backgrounds and professions. This will help ensure the designs cater to a wider demographic of users.

06

Explore alternative ownership and management models

The ownership, management and post evaluation – short, medium or long term – of spaces within the future passenger hub should be considered alongside the development of the competition brief or through the competition process. Post evaluation could be carried out by rail regulators, for example. The complex ownership and management structure of stations can limit their flexibility and give the stations a corporate feel. Light-touch, flexible alternatives such as community gardens, local art installations or market stalls offer a low resource solution with high social impact. We encourage rail industry leaders to consider the cultural shifts required to ensure that these types of practices are commonplace and encouraged. Based on ThinkStation, key stakeholders would like the new passenger hub to be, or at least feel, owned by local people.



Strategic advice for Network Rail and the rail industry

ThinkStation brought together over 120 organisations across the public, private and third sectors. From these organisations, key representatives posed questions and put forward strategic ideas on how Network Rail and the wider rail industry could better meet stakeholder needs. This advice is summarised below and explained overleaf.

-
- 01 Prioritise climate change in strategic policies**
 - 02 Refine Network Rail's Principles of Good Design**
 - 03 Continue to engage stakeholders within and beyond Network Rail**
 - 04 Innovate existing procurement and financing systems**

Prioritise climate change in strategic policies

Climate change is a global issue in which major national organisations have a role to play. The climate emergency was raised across the workshops as a critical issue that needed to be strategically addressed by infrastructure providers and others. The rail industry is directly affected by climate change with severe weather events, such as heatwaves, storms and flooding which can halt services, damage assets and cost providers millions of pounds. It is widely accepted that environmental action is needed to ensure commercial longevity and long-term profitability. Embedding climate action within Network Rail's policies, procedures and standards are crucial to ensure that the company is resilient to a destabilising climate.

These four drawings were visually facilitated at the final ThinkStation workshop and reflect the strategic conversations of participants.

“Bold civic leadership from our national organisations can help them to think differently about the decisions they are making and impact they are having.”



Lucy Musgrave, speaker, 'contextual' ThinkStation



Refine Network Rail's Principles of Good Design

In 2018, Network Rail's Principles of Good Design was published with high-level principles to guide all Network Rail developments, encouraging a consistent standard across all built environment projects. Each ThinkStation workshop was focused on one of Network Rail's Principles of Good Design, posing the question of what a future passenger hub would be if it embodied that principle. This process interrogated the principles, and wider document. The feedback is summarised below:

- ThinkStation increased awareness of Network Rail's Principles of Good Design, but more work is needed to spread the message about the practical role these principles should play in projects. Network Rail should consider in more detail how the Principles of Good Design are embedded in project delivery and other policies.
- The vision for, and language of, the Principles of Good Design should be more user-focused and understandable across built-environment sectors. ThinkStation highlighted that key stakeholders interpret the principles differently. For example, 'connected' was interpreted as building strong relationships with the community, as opposed to efficiencies and ease of travel. These differences can present difficulties in translating and embedding the principles in projects.
- Across each of the principles, the meanings underlying those principles overlapped. For example, 'identity' was in part understood as creating 'community'. Similarly, 'enhancing heritage' was interpreted as ensuring 'contextual' responses.
- ThinkStation's 'sustainability' workshop covered a broad range of issues from environmental and economic to social and cultural. It was notably different from the previous ThinkStation workshops where participants could more easily and readily explore the principles and underlying themes. We therefore suggest that the term 'sustainability' should be more clearly defined in terms of what it means to Network Rail.



Continue to engage stakeholders within and beyond Network Rail

Stronger relationships and more fluid dialogue across the rail industry is needed to support future passenger hubs. ThinkStation illustrated that, while there is a deep desire to improve rail experience, the rail industry is still very much siloed. Better systems for collaboration within Network Rail and across the industry, particularly with Train Operating Companies (TOCs), are needed urgently.

Network Rail's determination to engage users and key stakeholders across Great Britain in the future of passenger hubs is highly commendable. We strongly encourage Network Rail and the rail industry to continue to engage in creative workshops, such as ThinkStation, to help broaden and elevate the vision of rail in Great Britain for future generations. ThinkStation provided an opportunity for open and frank discussions and debate on the rail industry. Network Rail encouraged these discussions and debates, showing openness to criticism as well as praise. This paves the way for more significant opportunities of culture change and quality of rail enhancements. We encourage Network Rail to maintain and expand this open dialogue, which can only help to foster stronger relationships across the rail industry.

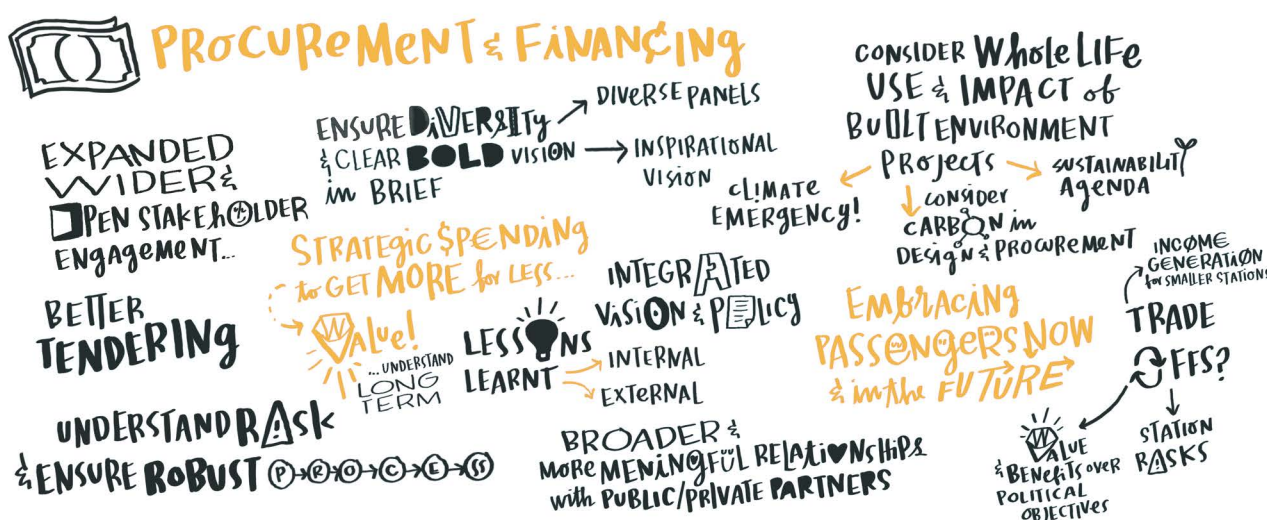


Innovate existing procurement and financing systems

The issues of procurement and financing for the future passenger hub could be summarised as the need to change 'business as usual' processes and improve ways of working both within and outside the sector. Ways of working from other sectors and countries, for instance, were suggested. It is important that Network Rail also record and take into account lessons learnt from projects on an ongoing basis. The key messages from ThinkStation were as follows:

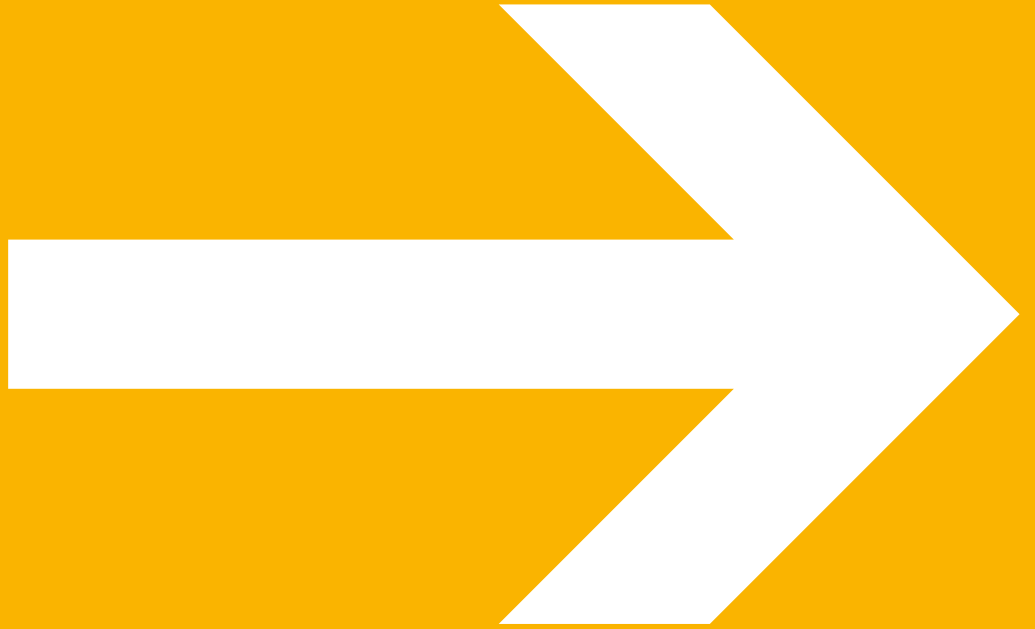
- **Clearer procurement systems and rules** – The current procurement process is viewed as overly complex, weighed down by contractual discussions and negotiations. The tendering process is costly, complicated, inflexible, bureaucratic and dictated by Network Rail, with unrealistic timescales and unidentified risks. Also, there is a need to understand how station development fits into wider national and local policies and processes.
- **Better tendering processes** – ThinkStation participants suggested that tendering processes in Network Rail could undermine the quality of the built outcomes. They proposed face to face engagement through the tendering process, providing tender applicants with better and more robust data, being more flexible in terms of outcomes and timetables, and better understanding and balancing of risk over the duration of the project between the teams. Procurement systems used in other sectors could be explored, particularly those which help to facilitate small to medium business involvement.
- **Encourage teams to be more realistic on deliverables and manage expectations** – Workshop participants at ThinkStation discussed the issues and lessons learnt in over-promising and under-delivering. They discussed how these issues can arise from the development of the brief through to the delivery of the project. They reflected on how some under-developed briefs left too much room for questions, interpretation and manipulation, and resulted in additional time and cost expenditure.
- **Clarify funding sources and systems** – Funding in general was identified as a key issue; the lack of funding available, poor understanding of where funding is coming from, the use of that funding in

projects, when that funding becomes available and by whom, the known and unknown financial risks involved in projects, and the untapped sources of funding from outside the rail industry. The Department for Transport, local authorities and private developers, for example, were identified as organisations with potential funding streams.









Impact

ThinkStation delivered much more than a public engagement exercise to develop the future station brief. It brought together an array of industries and organisations to share ideas and build relationships. The bespoke nature of the engagement, timing in the competition programme and the leadership from Network Rail and willingness of the rail industry to engage in the process all contributed to a positive and successful outcome.

Based on the survey results below, ThinkStation delivered its four key objectives:

- 1

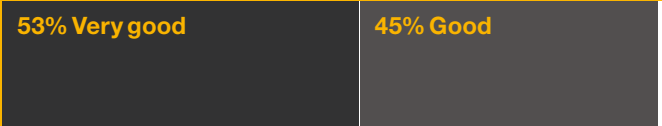
Understanding passenger and stakeholder priorities in relation to stations
- 2

Increasing awareness of Network Rail’s design principles and ambitions
- 3

Bringing together a range of passengers and industries to create new relationships
- 4

Facilitating the sharing of new ideas and best practice across sectors

The following pages outline the impact of Network Rail’s ThinkStation programme, taking into account feedback from evaluation surveys sent out after each workshop. Some 324 delegates attended 11 workshops and from these attendees, 125 surveys were completed.



98% of attendees had a positive experience.

Understanding passenger and stakeholder priorities

The ThinkStation workshops generated a remarkable amount of feedback, data, insight and understanding, not only surrounding the upcoming passenger hub competition but also touching on more strategic issues and opportunities. Following each workshop, Design Council reviewed and analysed emerging themes and ideas. This report captures that insight. It will shape the upcoming international design competition brief, and also inform Network Rail's practices on an ongoing basis.

“The interactive sessions were engaging, and all voices were heard.”

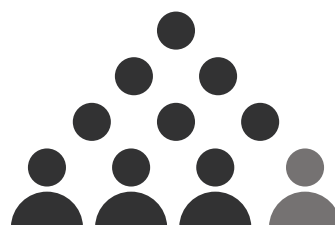
Mark O'Connor, Wood PLC

A range of people attended and everyone was encouraged to participate.”

Policy Officer, City Council

The day was really interactive and I felt like we achieved something at the end.”

Erin Kennedy, Filament PD



10 out of 10 people felt they were given the opportunity to contribute their perspective; 9 felt this strongly



99% of participants were clear about how feedback will be used

Increasing awareness of Network Rail's design principles and ambitions

Each ThinkStation workshop was structured around one of Network Rail's Principles of Good Design. The principles were explained by a member of Network Rail's Buildings and Architecture team and delegates were given a printed copy of the document.

“New perspectives and putting people and/or passengers first – the true value of inspiration.”

Tom Ingrey, Network Rail

I thought it was really positive that Network Rail had wanted to hold this event, and there were so many people from there who were interested. General engagement in the room was really good.”

Louisa Humm, Historic Environment Scotland

98% of attendees felt they had an increased understanding of Network Rail's Principles of Good Design



9 in 10 of participants felt they knew more about Network Rail's work on station design

Bringing together a range of passengers and industries to create new relationships

ThinkStation brought together over 120 organisations from a diverse range of industries – including the rail industry, community sector, design industries, other infrastructure and transport organisations, governments both central and local, as well as representatives from business groups. According to survey feedback all participants felt that they met new contacts and were afforded networking opportunities. These connections strengthen cross-disciplinary and co-working relationships.

“The cross fertilisation of ideas was great as was the dialogue and opportunity to create a vision.”

Alan Hughes, AH Architects

It was great meeting the variety of stakeholder groups, hearing their concerns and aspirations and having an opportunity to share visibility of Industry efforts and aligned aspirations.”

Team Manager, Network Rail

I appreciated the opportunity to work with a diverse range of industry colleagues.”

Stuart Freer, Greater Anglia



All attendees felt they met new contacts and had networking opportunities;
1 in 2 felt this strongly

Participatory organisations

Thank you to everyone who helped shape the ThinkStation series.

Abellio UK	HS1	Rail Delivery Group
AH Works	HS2	Railway Heritage Trust
AKT II	Historic Environment Scotland	Replastic
Arup	House of Commons	Robin Buckle Urban Design
Atkins	Incredible Edible	Roundhouse
Austin-Smith	Indapendant Consultants	Rail Safety and Standards Board
Avanti West Coast	Infrastructure and Projects	ScotRail
Babcock	Authority	Scott Brownrigg
BDP	Jacobs	Scottish Government
Bharat Light and Power	JCDecaux	Self employed
BPR architects	Jeni Lennox	Sevenoaks Town Council
Bradford's Mobility Planning Group	Journey Associates	Sevenside Community Rail
Brighton University	Knight Architects	Partnership CIC
BuroHappold	Knowle West Media Centre	Snook
Cambrian Railway Partnership	KPMG – Working for Waterloo	Stagecoach Bus
Camden Highline	station	Steer
CCD Design & Ergonomics	Landolt Brown	Street Spirit Design
Chapman Taylor	Landsmith Associates	Studio O+U Architects
Chester Shrewsbury Rail	LDA Design	Sustrans
Partnership	London Borough of Croydon	Sustrans Scotland
Clore Leadership	London North Eastern Railway Ltd	TC-A
Community Rail Lancashire	London TravelWatch	Thales
CRA Consultancy	Luke O'Donovan	Thrive
Darf Design	Manchester Metropolitan	Transport Focus
Davies Maguire	University	Transport for London
Department for Transport	Mantas Design	Transport for Wales
Design Council	Mobility and Access Committee for	Transport Scotland
East West Rail	Scotland	Umbrellium
EY Seren	Mott MacDonald	University of Birmingham
Fereday Pollard Architects	MTC	University of Lancaster
Filament PD	MTR	University of Leeds
Forth DC	MTR Elizabeth Line	University of York
Frankham	Network Rail	Urban
Friends of Littleborough Stations	NOOMA	West Scott Architects
GIA Equation	Norfolk County Council	Weston Williamson
Glasshouse	NURIS	Wilkinson Eyre
Go Upstream	Office of Rail and Road	Wilkinson Hall Ltd
Greater Anglia	Piercy&Company	Witteveen+Bos
GTR	PR Mandarin	Wood PLC
Hassell	Publica	
Hawkins\Brown	Q5	

Facilitating the sharing of new ideas and best practice across sectors

Each ThinkStation workshop began with a speech from an industry leader, many from outside of the rail industry. Across the series, there were 15 speakers ranging from a disability and gender equity advocate, leaders in the creative industries, a historian, members of the National Infrastructure Committee and central government. These speakers challenged the participants to think beyond the status quo and to explore new approaches.



8 in 10 delegates gained a strong understanding of design approaches



All participants thought differently about what's needed from future passenger hubs

97% felt they have tools and techniques to take back to your organisation;
1 in 4 felt this strongly

“The overall workshop was very well run and enjoyable. We were given a lot of information about current and future directions. The mix of attendees was good, well informed and interesting.”

 Andrew Postings, Jacobs

“I enjoyed the enthusiasm of all the speakers who were from diverse backgrounds and had different approaches.”

 Robert McBride, Transport Scotland



1

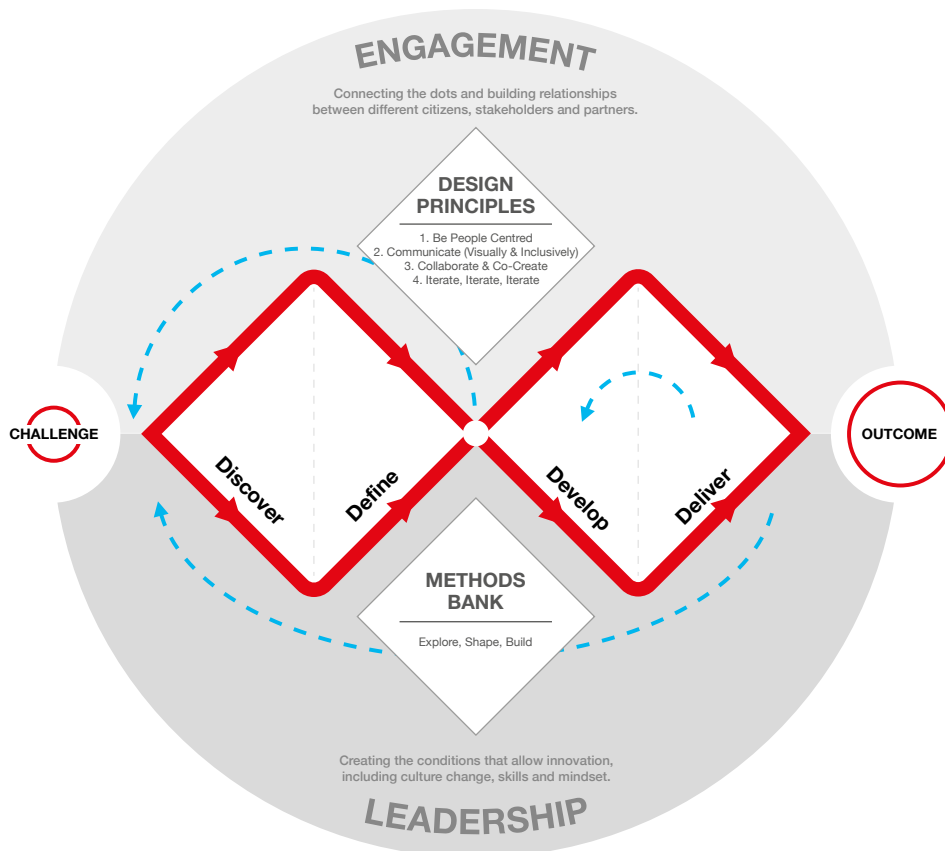
Appendix Framework for innovation

The ThinkStation workshops were designed using Design Council's framework for innovation. The framework helps Design Council to support the public, private and third sector organisations they work with to transform the way they develop and deliver services. At the heart of the framework for innovation is Design Council's design methodology, the Double Diamond – a clear, comprehensive and visual description of the design process.

As well as highlighting the design process, Design Council's framework for innovation also includes the key principles and design methods that designers and non-designers need to take, and the ideal working culture needed, to achieve significant and long-lasting positive change. Design Council's Double Diamond clearly conveys a design process to designers and non-designers alike. The two diamonds represent a process of exploring an issue more widely or deeply (divergent thinking) and then taking focused action (convergent thinking).

The framework for innovation outlines four core principles for problem-solvers to adopt so that they can work as effectively as possible.

- **Put people first.** Start with an understanding of the people using a service, their needs, strengths and aspirations.
- **Communicate visually and inclusively.** Help people gain a shared understanding of the problem and ideas.
- **Collaborate and co-create.** Work together and get inspired by what others are doing.
- **Iterate, iterate, iterate.** Do this to spot errors early, avoid risk and build confidence in your ideas.



2

Appendix **Stakeholder** **mapping**

This stakeholder list is a compilation from across the workshop series. At each workshop delegates were asked to think about those who would be involved in the shaping, delivery, commissioning and use of a new station. The lists from each session were extensive, identifying extreme users and outliers as well as those involved in stations every day. Participants also considered wildlife in the area. The combined expansive stakeholder list below demonstrates the breadth of people, organisations and areas impacted by rail infrastructure. Prioritising their needs, and involving a wide range of stakeholders, will be critical to achieving a successful outcome.



Natural environment	People with additional needs	Night time users
Animals	Carers	Night time walks for charities
Bee keepers	Elderly	Late night and early morning clubbers
Birds and insects	Mentally disabled users	Shift workers
Community growing groups	Person with colour blindness	Revellers
Dogs	Person with a hearing impairment	
Green wall contractors	Person with visual impairments	
Guerilla gardeners	Person with a mental health condition	
Guide dogs	Person with anxiety	
Local wildlife, birds, bats, foxes, rats	Person with temporarily reduced mobility	
Nature	Person with mobility aids	
Pets	People with access/mobility needs	
Planting groups	Person on a mobility scooter	
Trees	Person with permanent reduced mobility	
Biodiversity	Person with visual impairment	
	Pregnant women	
	Temporarily impaired	
	Single parent with young kids	
	Wheelchair users	

Non passengers	Passengers	Rail industry
AI	Bus operating company	Asset managers
Artists	Business travellers	Department for Transport
Atmosphere seekers	Car parking company	Passenger representatives
Bike thief	Commuters	Operators
Buskers	Conference guest	Track owner
Charities/ collectors	Council	Passenger groups
Disorientated tourist	Day trippers	User groups
Dog walker caught in the rain	Early morning commuters	Access groups
Drug user	Event goers	Devolved transport bodies
Homeless people	Families	Rail delivery group
Local artists to exhibit work	Families with children	Train operating companies
Pedestrians using station as a cut through	Fast and slow people	
People looking for a local hang-out	Festival goers	
People passing through	Future generations	
People visiting for lunch/dinner	Group travellers	
Pick pockets	Holiday passengers	
Protestors/demonstrators	Last minute travellers	
Rail chaplains	Leisure travellers	
Railway enthusiasts	Night travellers and night trains	
Smokers	Night worker	
Someone meeting or dropping off	Non-English speakers	
Person with suicidal thoughts	Patients (hospitals)	
Trainspotters	Peak time commuters	
Trespassers	People meeting on a blind date	
Vandals	Rugby and football fans	
	School groups/trips	
	Shift worker	
	Sports fans	
	Students	
	Tax payer	
	Teenagers	
	Tourists	
	Travelling to school	
	Travelling to the airport	
	Visitors and tourists	
	Walkers and walking groups	
	Young people	
	Weekend users	
	Students	
	Musicians that take big instruments on trains	
	Parents with buggies	
	Parents with children	
	Passengers with very young children	
	People going to the seaside in the summer – (surfboards)	
	People with bicycles	
	People with heavy luggage	
	People with large objects to carry	
	Single parents travelling with multiple children	

Government	Station and rail staff and contractors	Business and retail
Local authority	Approved providers	Advertisers
Local planners	Architects	Builders – small refurb
Politicians	Car Park attendants	Business owners
Central government	Cleaning contractors	Business staff
	Design Teams	Business users
	Designers and contractors	Commercial partnerships
	Engineers	Customers
	Highways	Digital app station information
	Landscape architects	Exhibition stall owners
	Lift engineers	Freight distribution companies
	Litter picker	Large employers
	Maintenance staff	Leaseholders
	Network Rail	Leisure
	Planners and analysts	Local and national businesses
	Platform assistant	Local apprenticeship providers
	Project construction staff	Multinational contractors
	Regional transport body	Private developers eg Berkeley
	Regulatory Transport authorities	Recharging car suppliers
	Revenue Protection	Recycling and waste contractors
	Sculptors	Restaurant next to station
	Service deliveries	Retailers
	Signallers	Retail tenants
	Station offices	Sales outlet staff
	Station staff	Shoppers
	Station workers	Supply chains
	Station workers, eg maintenance	Tech giants, e.g. Google Maps
	Structural inspectors	Telecoms
	Survey companies	Tenants
	Technical maintenance	Urban freight distributors
	Track maintenance	Utilities management companies
	Train construction workers	Utilities
	Train drivers	Vendors
	Train maintenance	
	Train manufacturers	
	Train staff	
	Volunteers	

Emergency services	Other transport modes	Wider community
British Transport Police	Bicycles	Adjacent landlords
Community support officers	Bus	Community rail partnerships
Fire brigade	Bus company	Current and future local residents
Paramedics	Bus drivers	Lineside neighbours
Passenger taken ill on a station	Car parking space owner	Local community groups
Police	Cyclist (storage)	Local community needs
Security staff	Cyclists	Local landowners
Security/terrorism	Electric bike provider	Local residents
IT – CCTV station	Husband picking up partner from commute	Neighbouring property owners
	Intermodal interchange	Neighbours
	Runners	Owners of neighbouring properties
	Tram	Residents
	Transport providers	Residents in over station development
	Transport staff	User groups
	Tubes	
	Taxi driver	



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