xR Stories

The Mayor's Local Transport Plan Consultation: York and North Yorkshire

Evidence submitted by XR Stories and XR Network+, University of York

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Written evidence from University of York

The Mayor's Local Transport Plan consultation

York and North Yorkshire Combined Authority

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About Us

The University of York is a world-class research institution, with strong links to the Creative and Cultural Industries and has for more than 20 years conducted applied research at the convergence of engineering, science, arts, humanities, and social science. This work is University-wide with particular strengths in the School of Arts and Creative Technologies, the School of Physics, Engineering and Technology, and the Departments of Computer Science and Psychology.

Based at the University of York, XR Stories was founded as an Arts and Humanities Research Council (AHRC) funded Creative Industries Cluster Partnership (CICP) and between 2018-2024 it provided £3.5m of funding to small and medium-sized enterprises (SMEs) working in virtual production (VP) and extended reality (XR) in Yorkshire and the Humber. It continues to provide researchers, companies, creatives and cultural organisations with access to expertise, infrastructure and facilities to unlock the potential of XR and next generation convergent media technologies. XR Stories also leads the 2022-2028 Engineering and Physical Sciences Research Council (EPSRC) XR Network+ VP in the Digital Economy project, which brings together five universities to undertake research into the future of VP and to fund co-created projects between academia and industry.

The work of XR Stories builds upon a series of major research projects relating to creative technologies at the University of York. Since 2014, the EPSRC Intelligent Games and Game Intelligence Centre for Doctoral Training has been developing the next generation of interdisciplinary researchers, designers, developers, and entrepreneurs for the games industry. From 2015-2022 the EPSRC/AHRC/Innovate UK (IUK) funded Digital Creativity Labs worked with Creative Industries partners to maximise impact from research in digital games, interactive media and AI. From 2020-2024 the Research England Screen Industries Growth Network (SIGN) introduced a portfolio of research, skills development, business support and diversity and inclusion interventions to complement XR Stories. Most recently, 2023 saw the launch of the University of York led CoSTAR Live Lab, one of five labs forming a connected infrastructure, funded by AHRC to support future R&D in the screen and live performance industries.

Since 2024 XR Stories has led The University of York York Policy Engine (TYPE) Creative Industries Policy Group, recently partnering with York and North Yorkshire

Combined Authority in the delivery of new data and evidence to support the growth of the regional creative economy. XR Stories also leads the Extending XR Mayoral Skills Innovation Fund project that brings digital skills to creatives across the region delivered in cultural venues from Settle to Scarborough.

Introduction

The evidence presented is based on two pieces of research that XR Stories has conducted focusing on the York and North Yorkshire Creative Economy and user participation in North Yorkshire's creative wellbeing provision. The first piece of research was conducted in partnership with the York and North Yorkshire Combined Authority, to gather new data and evidence on the Creative Industries in York and North Yorkshire[1]. Produced over the course of 2025, this work included the commissioning of an analysis of Creative Industries Size and Concentration report[2], a policy opportunities report[3], bespoke Creative Industries data requests to ONS Local[4], creative business/practitioner focus groups, and a Creative Economy Census produced in partnership with York and North Yorkshire Combined Authority[5]. While the main aim of this work was to improve understanding of the Creative Industries and the wider creative economy in York and North Yorkshire, it also generated a series of pertinent findings that evidence the interconnected nature and value that the creative and cultural heritage sectors hold for one another in the region. In short, the findings presented in this section serve to illustrate how the shared prosperities of the Cultural and Creative Industries in York and North Yorkshire are inextricably linked and pivotal to one another's success.

The second piece of research, Participation, Value and Evidence in North Yorkshire's Creative Wellbeing Provision, was conducted by members of the XR Stories team, and funded by The York Policy Engine, to understand creative activity

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[1] O'Connor et al., (2025) The Creative Industries in York and North Yorkshire: The evidence supporting our city, region and rural creative powerhouse. XR Stories, York and North Yorkshire Combined Authority. Available at: https://xrstories.co.uk/publication/the-creative-industries-in-york-and-north-yorkshire-the-evidence-supporting-our-city-region-and-rural-creative-powerhouse/

[2] Hatch Consulting., (2025) York and North Yorkshire Creative Industries Analysis of size and concentration. Available at: https://xrstories.co.uk/publication/york-and-north-yorkshire-creative-industries-analysis-of-size-and-concentration/

[3] O'Connor et al., (2025) Our Creative Potential: Policy opportunities for York and North Yorkshire. XR Stories. Available at: https://xrstories.co.uk/publication/our-creative-potential-policy-opportunities-for-york-and-north-yorkshire/

[4] ONS Local, (2025) Estimated number of creative industries jobs, for combined authorities and specified local authorities, 2020 to 2024. Office for National Statistics. Available at: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/adhocs/3036onslocalestimatednumberofcreativeindustriesjobsforcombinedauthoritiesandspecifiedlocalauthorities2020to2024

[5] Harrison et al., (2025) York and North Yorkshire Creative Economy Census Technical Report. XR Stories, York and North Yorkshire Combined Authority. Available at: https://xrstories.co.uk/publication/york-and-north-yorkshire-creative-economy-census-technical-report/

for wellbeing across North Yorkshire, from the perspectives of both residents who take part in it and the community organisations that deliver it.

In what follows of our response to the Mayor's Transport Plan Consultation, we firstly provide brief summaries of the two data sources from which the evidence that we provide is drawn. We then present this evidence framed around the following core themes (and select subthemes) within the Mayor's proposed local transport plan strategy:

- Vision
- Connected places
- Network principles

Data Source: *The York and North Yorkshire Creative Economy Census 2025*

The findings herein presented in this evidence are drawn from the results of the York and North Yorkshire Creative Economy Census 2025. The census collected responses from 205 individuals who work in the York and North Yorkshire creative economy, with detailed information provided on 277 primary and secondary roles held by respondents, and a further 4,319 people identified as being employed in the Creative Industries across the region[6]. The census included questions on the following topics:

- Profile of your primary/secondary business/organisation and role
- Barriers to business/organisation growth
- Business support usage, needs and improvements
- Innovation and sustainability
- Working with freelancers
- Support for the creative economy
- Creative spaces, networks and festivals
- Celebrating creativity in York and North Yorkshire

The census results revealed a regional creative economy that is geographically dispersed with 46% of respondents living in urban communities, 40% rural and 13% coastal. The sample is predominantly female (60%) with 60% of respondents aged 25–54. Most respondents (65%) work in a single creative economy role, while 35% hold multiple roles. The majority of respondents (73%) were employed in Creative occupations within the Creative Industries, while 14% worked in non-creative occupations within the Creative Industries and 13% worked in creative occupations outside of the Creative Industries.

[6] Other more comprehensive datasets[1] have estimated this figure at between 18,000 and 23,000 jobs.

Data Source: *Participation, value and evidence in North Yorkshire's creative wellbeing provision*

Further evidence is drawn from Participation, Value and Evidence in North Yorkshire's Creative Wellbeing Provision[7]. The study examines who takes part in creative wellbeing activity across North Yorkshire, what benefits participants gain from taking part, what enables or hinders organisations to deliver such activity, and how they evidence its value. The study draws on interviews with 14 organisations delivering this activity across the region, and from a survey of 57 North Yorkshire residents, 30 of whom had taken part in creative wellbeing activities, and 27 who had not.

While transport was not a main focus of the study, it was raised in most interviews. This study adds the perspectives of residents who take part, or who might take part, in creative activity for their wellbeing, and of the organisations that make that activity possible.

Vision

The results of the York and North Yorkshire Creative Economy Census illustrate how working conditions for creative practitioners differ for urban, rural and coastal areas within the region. This was most notable in accentuated difficulties with finance and access to workspace experienced by coastal respondents and in the need for improved access to networking opportunities among rural respondents. Transport was frequently cited as a barrier by respondents that impacted their day-to-day experience of working in the regional Creative Economy. The findings of the census therefore support the need for high-quality and well-connected urban, rural and coastal places.

Furthermore, the creative wellbeing study supports the vision's ambition for healthier, safer and more active communities. Participants rated taking part in creative activity as having improved their wellbeing and helping them feel more connected to others. Whether residents can reach this and other types of cultural and creative activities depends on transport: providers described rural residents who cannot get to sessions, and providers paying from their own budgets to bring people in or take activity out to them. A transport network that connects people to the places where community activity happens would support the health and wellbeing goals that the vision aims for.

[7] Neyra et al. (2026) Participation, value and evidence in North Yorkshire's creative wellbeing provision. XR Stories. Available at: https://xrstories.co.uk/publication/creative-wellbeing-report/

Connected places

Our evidence supports the need for improvement of transport connections at the local and regional level, and demonstrates that there is inequality in how this need is seen differently across urban, rural and coastal areas. When asked what barriers were particularly relevant to their businesses/organisations, 20% of census respondents cited poor local transport, with this being the sixth most common general barrier cited by respondents. Examining these results further revealed notable differences in the responses of workers who were based in different geographical areas, with just 16% of urban respondents citing poor local transport, compared to 21% rural responses, and 29% coastal.

Further results from the same census question also evidence this stark regional imbalance, with 32% of respondents reporting their *York/North Yorkshire* location as being a barrier, and this being the fourth most commonly reported general barrier. However, examining these results by geography revealed less of a divergence between urban (30%) and rural (33%) respondents, yet the more widespread coastal difficulties remained, with 38% naming it as a barrier.

Creative wellbeing organisations also reported struggling to reach participants outside the towns where they are based:

> *"If people haven't got transport [it] is a massive issue [...] so [our services are] great for people who live in Harrogate, it's great for people who live on a bus route into Harrogate [...] But there's lots and lots of rural communities that don't have that. People come and see us sometimes, and [say] 'I'd love to come, but I just can't say I'm going to get here,' so there's a gap there."*

An interesting finding from the creative wellbeing survey is that, for those that had taken part in creative activity, 90% said the venue's location made it possible for them to attend, while only 20% said transport did. Additionally, few named transport as a barrier: 10% of participants and 15% of non-participants. On its own, that could suggest that transport is not much of an issue for people to participate in creative and cultural activities, but we see from providers that they are doing a lot of work to either take provision to those who are more isolated, or aiming to provide the transport privately themselves, which adds to their costs.

Towns and cities:

Notably, urban-based Census respondents were the only group that provided any positive reflections on transport within the region. When asked how living in York and North Yorkshire had influenced their work, one urban respondent commented:

> "*It is an excellent place to work owing to strong transport links*"

While another responded:

> "*The York lifestyle doesn't waste time with difficult commutes and the other time sinks that come with bigger cities or less connected places.*"

However, other urban respondents were less positive about transport links within the region, writing:

> *"travel by train is expensive and unreliable, roads are very heavily congested"*

While another urban respondent, reflecting on working in rural areas, stated:

> *"I quickly realised that in rural areas access to high quality creativity can be a challenge for people who do not drive."*

In response to a Census question around difficulties finding suitable workspace within the region, one urban respondent said:

> *"Also [workspaces] that do have car parks are so far away from public transport it's difficult for people to get there. I have had to invest in a space in Pudsey and risk losing work due to being too far out and ridiculous travel just to get an affordable space."*

Rural areas:

Compared to urban respondents, those based in rural areas reported many more concerns related to transport, particularly around the lack of good quality public transport provision. In response to a Census question asking respondents about services they would like to see, one stated that:

> "*Public transport is a real issue*"

While in response to a question asking how living in York and North Yorkshire had influenced their work, another rural respondent commented that:

> "*Better infrastructure and public transportation options would allow for easier travel.*"

Creative wellbeing providers described the same problem:

> *"In rural areas, rural isolation is a real issue in areas like this. Transport links are really bad. People can't get to and from health appointments, they can't get to their local museums and galleries and things like that. We do have a mobile library service, which does travel around the county and is of massive benefit, but it's not enough."*

This sentiment that those in rural areas experience isolation was echoed by a respondent to the Creative Economy Census, saying:

> "*Freelancers often struggle with isolation in rural areas*"

When asked what services would be of value to their businesses or organisations, rural respondents in particular called for better access to transport and networking opportunities that aren't just (City of) York specific.

Creative wellbeing providers often make an effort to reach rural communities. Sometimes they take on the burden of arranging transport themselves. For example, when applying for funding, one provider builds in "*a travel budget, so if anybody does want to engage with the programmes that we are offering, but don't have access to transport, that we can support and facilitate that transport*", while another "*put in a grant to do a visit to the theatre [...] to take the local minibus with people who hadn't been to the theatre [...] York's a long way from here, and public transport is impossible if you want to get home afterwards.*"

Other times, providers may go to where the community is, "*making sure that the activity is happening in those areas where there is no bus routes coming through*": "*we always try to use community venues [...] we need to go where people are*", because "*if you're going to have creative health reach into communities, you need to do it in place*". Either way, reaching these communities adds to providers' costs, because they cannot rely on existing transport infrastructure.

The availability of creative spaces was also an area that intersected with respondents' concerns over travel and transport. Creative spaces identified by census respondents tended to cluster tightly around York and larger towns such as Scarborough and Harrogate, with these urban centres typically hosting a variety of well-equipped spaces. This contrasts with creative spaces serving rural communities which tend to be more sparsely spread. This was highlighted in responses to a question on the importance of creative spaces to respondents' work in the regional creative economy, with urban respondents asking for specific further improvements to existing provision, whereas rural respondents' need focused on the basic availability of fit-for-purpose spaces within reasonable travelling distance.

This sparsity of creative spaces across rural areas was mirrored in rural workers' experience of access to creative networks. In responses to a question asking urban Census respondents about the importance of creative networks, issues raised were most typically critiques of the kinds of network provision available, however, in rural areas the primary concern was a lack of availability or awareness of networks, with over a third of rural respondents (34%) reporting that they were not aware of any near them. Awareness was also a big issue for creative wellbeing programmes: not

knowing what is available was the most common barrier among those who hadn't taken part in a creative wellbeing activity (56%).

Together these findings underscore the importance of ensuring that all areas and geographies within York and North Yorkshire have access to high quality reliable and affordable transport infrastructure that helps to connect workers and work across the entirety of the region and beyond.

Coastal communities:

Creative wellbeing providers on the coast described how limited rail connections affect who they can recruit. One said about Scarborough:

> *"We are at the end of the line on the train. There's two trains an hour which are not very reliable, so either we need somebody who lives in Scarborough or can drive a commutable distance, but a producer who's living in Leeds, for example, would probably not apply for a job with us, or not a full-time job with us, because [...] the commute's just too annoying and long."*

This also impacts the visibility of what is happening in the region. The same provider said:

> *"We can't get reviewers from London, they don't come to Scarborough, it's been really difficult to do that [...] the struggle that we had to get reviewers to come up to these mostly northern towns to come and review was really difficult. Because there's so much available in London, they don't need to leave."*

These sentiments were also reflected by a coastal-based respondent to the Creative Economy Census:

> *"Problem of relative isolation - for example there are only so many people who may want [photographic] headshots in the area."*

Destinations outside the region:

While some urban-based respondents cited good national and pan-regional rail links available from the region as a positive:

> "*Being in York gives good proximity to Scotland and London*"
>
> *"being only two hours from London is also a positive"*.
>
> "*Fantastic rail access to London and Leeds*"

There were also concerns around the willingness of prospective employees to travel from outside of the region, with another urban respondent saying:

> *"Skilled workers are often employed in Leeds and are reluctant to travel to York and see York as a less creative destination to work"*

Collectively, these findings underline the importance of the inclusion of Rural areas, Coastal communities and Destinations outside the region areas as three of the five place types that are proposed for prioritisation in the transport strategy.

Network principles

Accessible, inclusive and safe for all:

Many creative activities occur during the daytime, but this limits who can attend. Respondents to the survey reported time as the most common barrier to participating in creative wellbeing activities (30%), and providers have said they want to deliver more evening sessions for those who work during the day, but in rural areas the transport isn't there:

> *"Specifically in the Yorkshire Dales, the public transport is few and far between, unfortunately [...] Even just thinking how you time things in your program, and thinking about the season, for example, [if] you're asking someone to come from one side of the Dales over [...] especially maybe in winter, then it's just a no, they're not going to do that, or they can't physically."*

Those with long-term health conditions are more likely to experience more barriers to participate in activities. Participants with a long-term health condition named an average of 2.8 barriers, compared to 1 for those with no long-term health conditions. Transport that isn't accessible can be a huge barrier: one venue described how

> "*the biggest hurdle for [people with disabilities] is transport, because a lot of them need special transport, [or] even a taxi. So if there's no transport available, no one can afford it, then they don't come.*"

Another described how their venue

> "*unfortunately, is a tricky position for anybody with mobility challenges, because the bus doesn't stop outside*".

These sentiments were echoed by coastal-based Creative Economy respondent who shared:

> "*As a disabled person, my inability to attend events is very limiting.*"

Clean and green:

The vast majority of respondents to the Creative Economy Census were highly supportive of initiatives aimed at improving the environmental sustainability of their

work, with 83% reporting having taken some sort of action for sustainability. A wide array of actions in support of the environment were reported, including respondents opting to walk and make use of public transport, where possible. However, respondents described concerns around how available travel options affected the environmental sustainability of their work, saying: "*My largest footprint is travelling out of North Yorkshire to a location I can afford.*"

Recommendations

- Bus routes need to reach rural communities: bus routes need to be extended and more bus stops added in rural areas so people can reach creative spaces.
- Bus services should run later into the night, so people can get home after an evening out, such as a visit to the theatre in York.
- The plan should consider how disabled people and people with long-term health conditions can complete the whole journey, including the "last mile" from the bus stop to the venue or back to their homes, for example through taxi vouchers.
- Support community transport as part of the network: minibuses and village buses are already doing important work to connect isolated residents with creative and cultural activity. The plan should consider how this community transport could be supported as part of the wider network.
- Rail services to coastal towns need to be more frequent and reliable to attract business and visitors.
- The plan should consider how people can get to cultural and creative destinations throughout the day and across the year, and not only to work. Access to culture supports the vision's ambition for healthier, safer and more active communities.
- Public transport cannot, and arguably should not, solve all problems for the most geographically isolated communities, so investment in transport should sit alongside support for local venues and workspaces.

Conclusion

The evidence presented in this response shows how transport shapes who can work in the creative economy; take part in provider-based creative activity and creative health programmes; participate in culture; and how for many, limits *when* this is able to take place. The findings also demonstrate the extent to which these transport-driven barriers are felt in different urban, rural and coastal geographies across the region, with transport issues contributing to complex combinations of wider challenges disproportion experienced by individuals who are living in non-urban areas.

While all five connected place types identified in the strategy clearly represent areas for which improved fit for purpose transport would greatly benefit the region, our evidence suggests that rural and coastal areas are those that demonstrate the greatest level of need, with challenges also for transport to destinations outside the region. Our evidence suggests, from a regional perspective, that towns and cities demonstrate comparatively less need. The evidence also supports the importance of new transport provision for these areas being accessible, inclusive, and environmentally sustainable.