



Using health evidence to influence urban regeneration in Bristol

The issue

Built and natural environments affect our physical and mental health. However, urban development can result in towns and cities that do not support good health and wellbeing: homes may be of poor quality; greenspaces may be insufficient; cars may dominate with limited infrastructure to support walking and cycling; and social infrastructure, such as community centres or health centres, may not meet the needs of the local community.

Our research identified key challenges for influencing healthier urban development. This includes different stakeholders having multiple priorities (many of which relate to the wider determinants of health, such as housing, transport or greenspaces), which results in trade-offs that may not maximise health outcomes. A further challenge is ambiguity and perceived subjectivity about what constitutes 'healthy' development.

Our response

We wanted to find ways to support healthier urban development decision-making and partnered with Bristol City Council (BCC) to develop and share health evidence about urban environments.

We placed one of our own researchers to work directly as part of a regeneration team at BCC for three and half years to fully collaborate on a large-scale spatial development project from the outset.

Frome Gateway regeneration

We became part of the delivery team for the Frome Gateway regeneration framework. This milestone document provides



Figure 1: Frome Gateway regeneration area
Credit: Allford Hall Monaghan Morris

the principles for development in a predominantly industrial area of central Bristol, which also includes community uses and greenspaces along the River Frome. The surrounding area is in the 10 per cent most deprived in the country and is ethnically and linguistically diverse. More than 1000 new homes, accommodation for 500 students and employment spaces are planned across 15 ha, largely by the private sector. The framework is crucial for guiding all of this development as it becomes a material consideration for any changes that require planning permission.



Local authority partners



University consortium



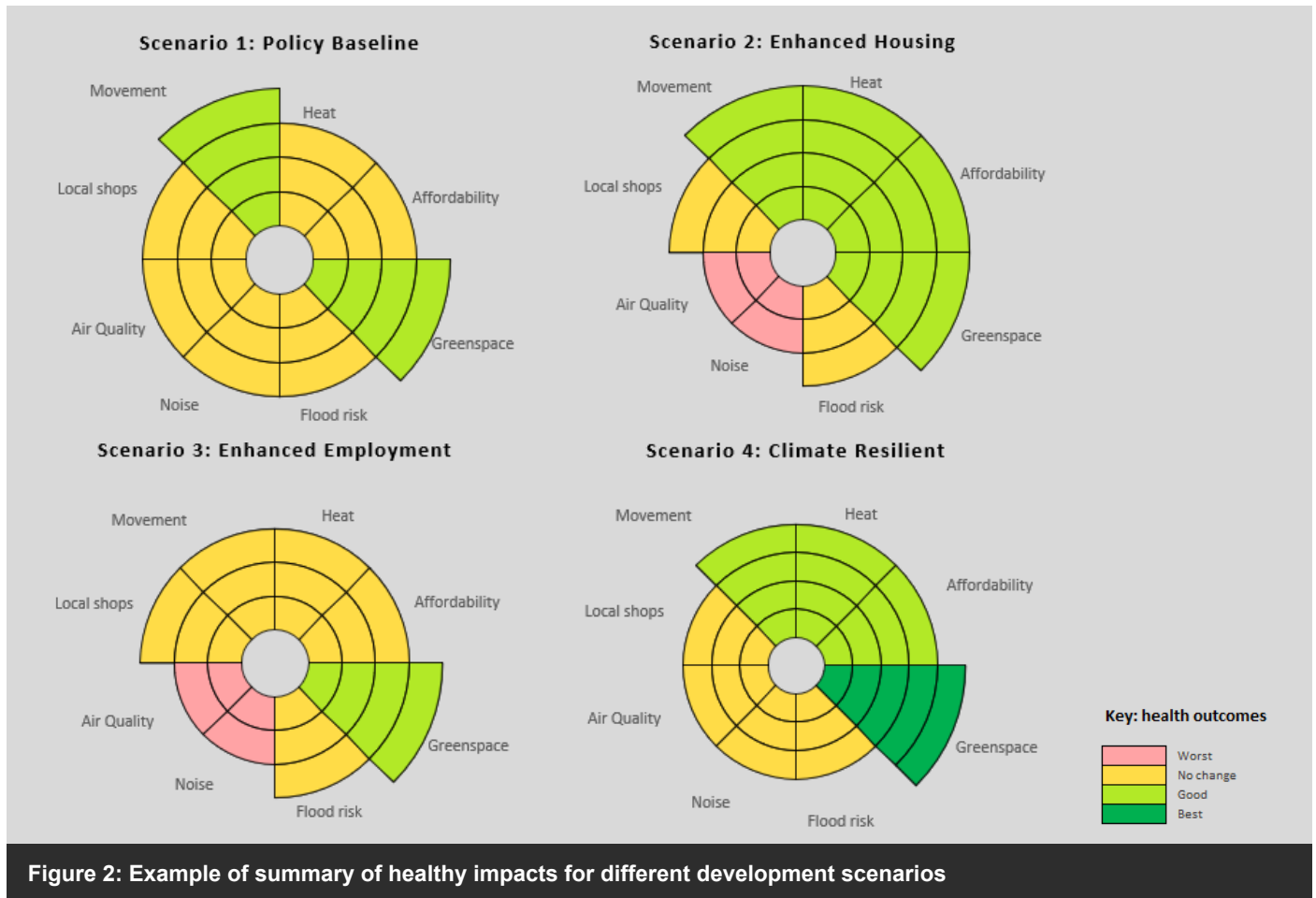
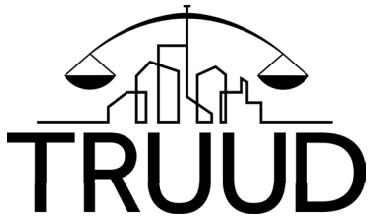


Figure 2: Example of summary of healthy impacts for different development scenarios

What we did

Our Researcher-in-Residence shared health data with design team members at key points in the project to inform decisions about the regeneration framework.

Part of this included developing a unique valuation model that demonstrates the health economic impacts of changes to the environment. This included using data from our local residents' survey ('Live Local') that explored perceptions of the existing environment. We were able to model the impact of different development scenarios on people living in or near to the regeneration area, including chronic long-term illnesses such as diabetes and asthma, mental health problems, injuries, premature deaths, and the associated economic costs. Our [HAUS model](#) (Health Appraisal for Urban Systems) helped the BCC team consider trade-offs of different land uses i.e. housing, employment and greenspaces, as shown in Figure 2.

We estimate the health economic benefits of the framework approach to be £80-£100 million, compared to an unmanaged approach with piecemeal development.

We also conducted Health Impact Assessments (HIA) for the framework. These spanned 11 wider determinants of health issues: accessible and affordable homes, health and social infrastructure, greenspaces, air quality and noise, active travel, crime and safety, healthy food, work and training, social cohesion and inclusive design, minimizing use of resources, and climate change. We [published the HIA](#) alongside the consultation version of the [Frome Gateway framework](#). It highlights expectations for developers and other stakeholders for healthier place-making.

To understand the impact and wider learning from our interventions we interviewed the design team members we had worked with, analysing this data alongside TRUUD meeting notes and our field notes.



Figure 3: Frome Gateway Health Impact Assessment

Impact on health

Our health evidence and modelling informed design considerations for the regeneration framework. For example, presenting the health impacts of creating a new park helped gain political support to pursue this challenging option (the potential land is privately owned therefore requires a land swap).

Our impact is also visible in the health messaging throughout BCC's Frome Gateway regeneration framework document, with summary boxes highlighting important environment and health linkages (see below).

<p>Prolonged exposure to housing costs above 30% of income can have a negative impact on mental health, increasing risk of mental disorders</p> <p>Health Outcomes </p>	<p>Improvements to green space quality and quantity could bring £30 million additional benefits, through improved mental health, and reduced risk of cancer and childhood obesity.</p> <p>Health Outcomes </p>
<p>Access to healthy and affordable food, community food growing and availability of supermarkets is shown to have associated health benefits, such as increased fruit and vegetable intake.</p> <p>Health Outcomes </p>	<p>Feelings of neighbourhood belonging can reduce isolation and improve mental wellbeing. This can help overcome mental health inequalities associated with socio-economic deprivation, particularly in older people.</p> <p>Health Outcomes </p>

Key messages

We identified that health evidence can be used in different ways:

- Highlighting unhealthy problems to be addressed;
- Adding weight to support commonly accepted good, and/or aspirational, design solutions;
- Considering competing issues where trade-offs are needed.

Including a public health perspective during design discussions can highlight health and wellbeing considerations to factor into decisions. It can ensure that evidence is provided at the right time, and in appropriate formats for different audiences. This is particularly helped by tailoring health evidence for the local context and population.

The [embedded researcher approach](#) can increase academic understanding about complex public health systems, such as for urban development decision-making, and create opportunities for collaborative interventions with practitioners. It can make interventions more timely, relevant and impactful.

Next steps

We are evaluating how including the HIA and health messaging in the framework document has an impact on design decisions by developers by analysing planning applications for sites at Frome Gateway and conducting further interviews with local government and developers.

About Truud

'Tackling the Root causes Upstream of Unhealthy Urban Development' (TRUUD) is a 5-year, £6.7m research project that aims to design policy interventions to support the development of healthier urban environments. Our research seeks to promote a fundamental shift in thinking about how to prioritise healthy urban development. We are funded by the [UK Prevention Research Partnership](#).

Contact the authors

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