Institution: Newcastle University		
Unit of Assessment: 13 Architecture, Built Environment and Planning		
Title of case study: Planning for Public Health: Influencing Policy, Guidance and Practice		
Period when the underpinning research was undertaken: 2003 – 2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	**Role(s) (e.g. job title):**	**Period(s) employed by submitting HEI:**
Tim Townshend	Professor of Urban Design for Health	1993 – ongoing
Period when the claimed impact occurred: August 2013 – December 2020		
Is this case study continued from a case study submitted in 2014? N		

1. Summary of the impact

This case study illustrates the changes to public policy and practitioner knowledges and activities that have been informed by Townshend's extensive research exploring the connections between the built environment and public health. This work has identified the challenges facing neighbourhoods experiencing high rates of obesity which tend to be over-provided with hot food takeaways; the existence of obesogenic environments; and, the emergence of 'toxic high streets'. In efforts taken to address these challenges Townshend has generated a productive, ongoing dialogue between policymakers and professionals from both public health and planning. This has directly shaped policy debates and the development of national guidance integrating public health and planning, and has influenced planning policy and guidance at both local authority and national-level.

2. Underpinning research

Modern urban planning developed in the 19th century, with a concern for public health at its core. In effect, planning and public health developed together, but as the 20th century progressed, they diverged into two separate professional disciplines. However, there is now widespread recognition that a radical reintegration is needed if we are going to successfully address the complexities of various crises of health and wellbeing. Of these, issues of obesity are paramount. Obesity is one of the most significant global health and societal challenges that we now face, and it is the main cause of cancer, after smoking, in the UK.

Obesity has also been identified as a major risk factor in susceptibility to poor outcomes in the Covid-19 pandemic. After experiencing the debilitating impact of the virus on his health, Boris Johnson, the UK Prime Minister at the time of writing, recognising his difficulties controlling his weight, has become a recent convert to the necessity to tackle the problem. It is not, however, a simple problem to address. Although the basic drivers of obesity – diet and exercise – are well understood at an individual level, the cultural, psycho-social and socio-economic factors that influence them at a more structural level are complex, multifactorial and, have proven difficult to get much purchase on at the level of policy.

The corpus of research that underpins this ICS begins with a paper published in 2006 that Townshend co-authored with Lake (at the time a dietitian and public health nutritionist at the Human Nutrition Research Centre (HNRC)) Newcastle University **(PUB1)**. The paper was the first published in Europe to make clear just how the built environment influences both physical activity and dietary behaviours (i.e. both side of the obesity equation). The key contribution of the paper was to show how 'closely related' built and food environments are, and why professionals from public health and planning need to work together to develop approaches to obesity management and prevention. This article is highly cited – a 6.3 field-weighted citation impact in Scopus and 725 citations in Google Scholar (as of 9 December 2020) – this is significant because the journal speaks to both an academic and *practice* audience. The paper was also cited in, the Foresight report *Tackling Obesities: Future Choices - Obesogenic Environments - Evidence Review* (2007)

which is widely credited with being the most important and influential report on obesity to be published in the UK in the last 2 decades. In 2015, Townshend was awarded a prize by the Royal Society of Public Health in recognition of this article being their most downloaded of 2014 – over 1000 times.

A crucial contributor to obesogenic environments are Hot Food Takeaways (HFTs), and they became a particular focus of Townshend and Lake's work. Although they only represent one element of the food environment (encompassing all opportunities to purchase and consume food) they are of special significance because they are implicated in the over-consumption of energy-dense and nutritionally poor food **(PUB2)**. The importance of these findings have recently been reaffirmed in 2018 and 2020 Public Health England (PHE) reports on *Calorie Reduction*.

A significant aspect of this research was to challenge planner's longstanding perceptions of the benefits of mixed-use areas. Townshend and Lake agree with prevailing views that such areas are largely beneficial because they encourage people to walk. However, as they reveal, if part of the 'mixed' offer is a concentration of take-away/fast-food outlets, then health outcomes may not necessarily be positive. Therefore, there are a variety of urban forms that may be regarded as 'obesogenic' **(PUB2)**.

Townshend and Lake's study of wellness centres in Sunderland also challenged accepted assumptions about fast food exposure. This research demonstrated that in towns and neighbourhoods which are 'car-orientated', exposure to fast food outlets may be underestimated. This is because most early studies only looked at walking distance from home. Townshend and Lake's research was the first in the UK to demonstrate the need for more 'context-specific measures in relation to the built environment and planning policy' **(PUB3)**.

Townshend has expanded upon the issue of HFTs, demonstrating how other potentially unhealthy shops and services (such as betting shops and payday loan providers) tend to cluster together, introducing the concept of 'Toxic High Streets' to describe this phenomenon. A paper introducing this notion supported the premise that there is a strong link between proximity, availability and consumption of unhealthy goods and services in poorer communities **(PUB4)**. The concept of 'Toxic High Streets' has now gained acceptance among public health and planning communities as a useful way of framing this issue **(PUB4)** and has begun to circulate more broadly.

Townshend and Lake's more recent research suggests that while there is still a very long way to go in aligning planning with public health priorities, significant progress has been made **(PUB5)**. Their most recent research has highlighted the inconsistent treatment of HFTs in planning applications that end up in the appeals system **(PUB6)**. This has led to a National Institute for Health Research (NIHR) School for Public Health Research project – *Understanding barriers and opportunities in the planning system to restrict hot food takeaway outlets* (February – December 2020) **(G3)**.

3. References to the research

All papers cited are published in internationally recognised journals, reach diverse disciplinary audiences, and have undergone peer review.

PUB1: Lake, A.A. and **Townshend, T.G.** (2006) Obesogenic Environments: exploring the built and food environments, *Journal of the Royal Society for the Promotion of Health*, 126(6): 262-267. https://doi.org/10.1177/1466424006070487

PUB2: Townshend, T.G. and Lake, A.A. (2009) Obesogenic Urban Form: Theory, Policy and Practice, *Health and Place,* 15(4): 909-16. https://doi.org/10.1016/j.healthplace.2008.12.002

PUB3: Townshend, T.G. and Lake, A.A. (2011) Relationships between 'Wellness Centre' use, the surrounding built environment and obesogenic behaviours, Sunderland, UK, *Journal of Urban Design*, 16(3): 351-367. https://doi.org/10.1080/13574809.2011.572254

PUB4: Townshend, T.G. (2017) Toxic High Streets, *Journal of Urban Design*: 22(2): 169-187. https://doi.org/10.1080/13574809.2015.1106916

PUB5: Lake, A.A., Henderson, E., and **Townshend, T.G.** (2017) Exploring planners' and public health practitioners' views on addressing obesity: lessons from local government in England. *Cities and Health*, 1(2): 185-193. https://doi.org/10.1080/23748834.2017.1393243

PUB6: O'Malley, C., Lake, A.A., **Townshend, T.G.**, and Moore, H. (2020) Fast food and the planning system in England and Wales: Decisions made by the Planning Inspectorate (PINS), *Perspectives in Public Health* 1757913920924424. Advance online publication. https://doi.org/10.1177/1757913920924424

Grants

G1: North East Public Health Observatory (October 2009 – September 2013) *Exploring the relationship between prevalence of overweight and obesity in 10-11 year olds* – GBP12,000, PI.
G2: ESRC (December 2014 – July 2017) *Reuniting planning and health: tackling the implementation gaps in evidence, governance and knowledge* – GBP30,109, Co-I.
G3: NIHR School for Public Health Research (February 2020 – December 2020) *Understanding barriers and opportunities within the planning appeal system to restrict hot food takeaway outlets* – GBP86,446, Co-I.
G4: PHE (June 2020 – March 2021) *Developing a Continuing Professional Development training package for local authority planning and public health teams to implement PHE's 'healthy weight environments: using the planning system' guidance, focusing specifically on the food environment* – GBP29,706, PI.

4. Details of the impact

This case study demonstrates two types of impact. First, significant impacts on public policy have been generated by Townshend's research on HFTs, obesogenic environments and 'toxic high streets' being sought out to be used as evidence to stimulate and inform policy debate on planning for health. This has resulted in the introduction of planning guidance and public health policy developments which Townshend has actively shaped. Second, Townshend's research has impacted on practitioners and the delivery of their work, this has been uniquely accomplished across both planning and public health professions. This has been achieved directly through sharing knowledge and increasing awareness of planning for health, and indirectly by changing the way policymakers seek to communicate and co-develop knowledge with their memberships. The impacts have reached across many local authority areas in England and also nationally through these dialogues and invitations to advise organisations such as Public Health England and Royal Society for Public Health.

All the impacts outlined in this case study have been achieved through a continuous dialogue initiated by Townshend between planning and public health researchers and practitioners, assisted by Lake – professional seminars, articles in professional journals such as *Planning* and *Town and Country Planning* and significantly the publication of the peer reviewed papers **PUB1** followed by **PUB4**. When Townshend and Lake set out to engage planning with healthier food environments in 2003 *no* local planning authority in England had a planning policy, or guidance in relation to HFTs. As of June 2020, some 162 out of 409 local authorities had policy/guidance in place, or in advanced development; with some 90% of this policy development achieved since 2013 **(IMP1)**. This is a remarkable number, and the coverage is *unparalleled* in comparison to any other specific planning use-class.

Early policy change was achieved in 2009 when a Planning Officer, at the London Borough of Barking and Dagenham was charged with writing a supplementary planning document (SPD) on restricting the proliferation of HFTs in the Borough. After finding that the sole expert on planning and food environments at that time was Townshend, the Planning Officer approached Townshend for help and advice in the drafting of what became SPD *'Saturation Point'*. This was the first HFT SPD to both focus on HFTs and health impact and to contain appropriately cited research material,

which is rare for this type of document. As a result, the *Saturation Point* author states: *"Townshend's contribution played a key role in successfully shaping the SPD*" and that the impacts of this SPD are ongoing and wide-reaching as it has "*led to the uptake of its recommendations by other councils nationally … evidenced by its heavy citation within their subsequently created HFT SPDs*" (**IMP2***)*. *Saturation Point* (2010) remains extant and a key document in the adopted Development Plan for Barking and Dagenham: the guidance is so robust that 11/12 requests for A5 change of use-class have been refused, with the SPD having being cited 3 times to defend refusal decisions for A5 approval at appeal (**IMP2** – A5 is the specific change of use-class relating to HFTs). Both *Saturation Point* in combination with Townshend's work "*provided the critical foundation*" from which Brighton and Hove developed an equivalent study and policy guidance, during 2011 and which also remains extant and continues to be used to guide planning decisions on HFTs near schools **(IMP3)**. The influence on, and change in, planning practitioner's awareness and practice initiated by Townshend's involvement in *Saturation Point* extends into influencing additional planning policy developments. The author of *Saturation Point*, now Principal Planning Policy Officer London Borough of Newham, notes this SPDs approach informed by Townshend's work has also "*extended into higher tier planning documents, most notably the London Plan December 2020. Policy E9*" with respect to HFT distance from existing or proposed schools (**IMP2**; see London Plan 2020 Policy Economy 9, pp.302-304, https://bit.ly/2NvFb2h).

The continued influence and reach of Townshend's work on HFTs and 'toxic high streets' has intensified since 2017 and can be evidenced in diverse policy arenas. His work has been directly cited by the Chief Medical Officer's Annual Report (2018) *Health 2040 – Better Health Within Reach* and 'toxic high streets' directly credited and referenced in the main text covering 'Changing behaviour for a healthier population' (chapter 8 p.2, **IMP4**). The research on toxic high streets led to an invitation to Townshend to author a dedicated on-line feature by the Design Council as part of their 'Active by Design' campaign to create healthy places (published 9 April 2014 https://www.designcouncil.org.uk/news-opinion/toxic-high-streets).

In turn, this work has come to the attention of Public Health England (PHE) and is achieving national impact. The Public Health Specialist Advisor within the Healthy Places Team at PHE stated that "*[Townshend's] work on obesogenic environments and more latterly Toxic High Streets is influential and has shaped the debate, in practice around how we plan our towns and cities in in the 21st century*." **(IMP5)**. Townshend's expertise has been drawn upon on several occasions by PHE: the Public Health Specialist Advisor and co-author of '*Spatial Planning for Health*' (PHE, 2017) detailed how Townshend's work had fed into this document which is noted as being "*the most significant document ever produced by PHE on place and health and has received widespread acclaim*" **(IMP5)**. PHE's recent report *Using the planning system to promote healthy weight environments: Briefing for Local Authority Public Health and Planning Teams* (London, 2019) recognises Townshend's role as importantly he is the sole non-clinical academic given acknowledgment as a contributor to the report **(IMP6)**. The report is specifically intended to 'support local authority public health and planning teams to use the powers of the planning system to promote healthy weight environments'. It cites **PUB4**'s findings about the frequent co-location of HFTs with other unhealthy land uses, 'such as betting shops, gambling and shisha bars and the availability of alcohol', before recommending 'local planning authorities to restrict planning permission for takeaways and other food retail outlets in specific areas' and provides guidance on developing SPDs and a practice framework for planners **(IMP6)**.

Townshend has also been working nationally with the Royal Society for Public Health (RSPH). Townshend was appointed an advisor to their campaign for healthier high streets in 2018 (https://www.rsph.org.uk/our-work/campaigns/health-on-the-high-street.html). RSPH have called on him to update the latest evidence on obesogenic environments, and his research working with young people and their attitude to fast food consumption has fed directly into their 2019 publication *Routing out childhood obesity* (RSPH, London). Indeed, Townshend is one of only four people (and the only built environment contributor) to be acknowledged in this report. This report launches their call 'to transform the street environment, particularly around schools, with the ambition that all children should have access to a healthy route home' **(IMP7)**.

The culmination of Townshend's impact on planning and public health professionals changing practice during this REF period is his appointment in June 2020 as lead on a new PHE project to develop a Continuing Professional Development (CPD*)* training package for local authority planning and public health teams **(G4)**. The project is implementing PHE's aforementioned (2019) '*Using the planning system to promote healthy weight environments* guidance', focusing specifically on the food environment, producing online training materials for roll-out across England and Wales. The package is undergoing testing with the following local authorities Blackburn with Darwen, Dorset, Essex and Hull, and will be available from March 2021 on the PHE Future Learn training platform. This will allow Townshend's influence to reach those remaining authorities that are currently not engaging with the issue of HFT proliferation.

In addition to the policy influence brought by Townshend's research in national and local contexts, his consistent dialogue with policymakers *and* practitioners has shaped, and is continuing to shape the evolving behaviours and approaches to planning for health undertaken by this diverse audience. As a result of Townshend's work and involvement – as outlined **(IMP1)** – the Northeast region now has the most comprehensive coverage of planning policy and guidance that seeks to stop the proliferation of HFTs in *all* of the English regions. His organisation of two events were of particular importance, in terms of spreading good practice across the region's public health and planning professionals. These were held through the FUSE Centre for Translational Research in Public Health (http://fuse.ac.uk). The first, *Reuniting Planning and Health* (7 March 2016), attracted 100 attendees from practice and academia. The second, *Planning for Healthier Diets* (21 May 2018), attracted over 90 public health and planning practitioners from across the Northeast and beyond. The event also had an invitation-only morning workshop that brought together practitioners who were actively working on, or who had produced planning guidance, to exchange experiences and debate best practice.

More indirect influence by Townshend as to how knowledge is communicated by policymakers with their professional memberships is evidenced by Public Health England's reflection on their 'Creating Healthier Communities' workshop as part of the Whole Systems Obesity National Learning Event (Leeds, October 2016): noting Townshend's contribution went beyond sharing substantive knowledge and was "*contributing to the debates about how we communicate and co-develop knowledge with practitioners*." **(IMP5)**.

5. Sources to corroborate the impact

IMP1: UoA Analysis of the number and type of planning policy/guidance produced by all English planning authorities on the subject of (A5) Hot Food Takeaways (HFTs) from 2009 – 2020.
IMP2: Testimonial letter, Principal Planning Policy Officer London Borough of Newham, formerly Planning Officer at London Borough of Barking and Dagenham and author of its *Saturation Point* SPD documentation.
IMP3: Testimonial letter from Principal Urban Planner PJA consultancy, formerly Brighton and Hove City Council and author of *Hot-food takeaways near schools; An impact study of hot food takeaways near secondary schools in Brighton and Hove*.
IMP4: Davies, S.C. *Annual Report of the Chief Medical Officer, 2018: Health 2040 – Better Health Within Reach.* Department of Health and Social Care (2018).
IMP5: Testimonial letter from Public Health Specialist Advisor, Healthy Places Team, Public Health England.
IMP6: Public Health England *Using the planning system to promote healthy weight environments: Briefing for Local Authority Public Health and Planning Teams,* PHE, London (2019).
IMP7: Royal Society for Public Health *Routing out childhood obesity*, RSPH, London (2019).