design matters

Matthew Carmona on the multiple benefits of investing in improvements to our town and city street environments

investing in street appeal



The quality of the street environment affects us all. Whether we are walking to school, waiting at a bus stop, cycling to work, shopping, or even driving through a city, how streets handle and balance the various, complex and often conflicting needs of users has a profound impact on our daily lives and wellbeing. At the same time streets are often highly constrained physically – not least in the current COVID-19 dominated world – and this means that we need to make hard choices about which functions to prioritise and where.

These are choices that cities around the world are having to make and, prior to COVID-19, increasingly such choices were coming down on the side of streets as more than just movement corridors to facilitate the passing of traffic. Streets also have a vital 'place' function, reflecting their role as environments within which we meet and (in normal circumstances) socialise, where businesses are located, where we walk and cycle, and where the public life of the city carries on – COVID or not.

International evidence suggests that the more appealing streets are physically, the more conducive they are likely to be as locations where the social, economic and even cultural life of the city will



Re-prioritising street space

flourish and where populations will be healthier and perhaps even happier and more engaged with their local community, too. The danger is that as we move to a post-COVID – or at least post-COVIDpeak – world, we may be tempted to move back into our cars in order to avoid mixing with others. All too easily we could find ourselves retrenching from practices that have sought to move us away from vehicle dominance in our cities.

This would be a mistake. Not only would it exacerbate another longer-standing health crisis – the obesity one – but it would put a further nail in the coffin of many high streets, which are only just now attempting to recover from weeks of lockdown. My own (pre-COVID) research examined the multiple benefits of investing in London's local street environment. If anything, the findings are even more relevant now in the very different world in which we find ourselves.

'Network efficiency' to 'movement and place'

Transport for London (our research's funder) has itself been on a journey in this regard, with recent innovations in street design reflecting a significant move from a 'network efficiency' model of street management to a 'movement and place-based' one. In this, streets are seen as places of complex social and economic exchange as well as channels for movement. This is a fundamental change in our understanding of the planning, design and use of streets, but the benefits and/or problems that flow from this still need to be better understood, and it is these that the *Street Appeal* research attempted to understand.¹

Unfortunately, as a research problem, investigations of this type are fraught with practical and conceptual challenges. The re-design of streets is likely to bring with it concerns from businesses or residents along the route, who may be worried that parking, servicing and other amenities will be compromised, or that street improvements may lead to unintended impacts on the price of local housing or to gentrification.

The danger is that these very real and tangible concerns can drown out consideration of intangible and hard-to-measure benefits such as more space to socialise and enjoy the environment, greater encouragement for walking and cycling, with

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Pairwise comparisons - for example Clapham versus Camberwell

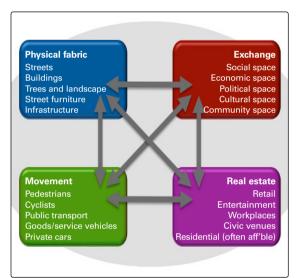
associated health benefits, or the knock-on impacts on private investment in an area.

There are also challenges associated with how to ascribe value to intangible qualities such as the wellbeing benefits of a more convivial walk to the shops, or the social benefits provided by a local café with external seating in a sunny spot. While it is not easy to entirely overcome these sorts of difficulties, the aim must be to sufficiently overcome them in order to deliver reliable and testable results. This requires a robust research methodology.

How did we do it?

In an attempt to address head on the multiple conceptual and practical challenges associated with this sort of research, a mixed comparative research methodology was adopted. The key features of the approach were:

- Pairwise comparisons the research used five paired street environments, five improved cases against five unimproved comparators, chosen as a means to track the impact of design interventions in comparable locations against value outcomes while controlling, as far as possible, for extraneous factors.
- An holistic analytical framework once selected, comparative analysis demanded the collection of suitable available data to represent both the quality and value aspects of street interventions. A holistic framework representing the key dimensions of street functionality was adopted: as pieces of physical built fabric, as places for social/economic exchange, as movement corridors, and as complex bits of real estate.
- Data selection, gathering and analysis data was selected and analysed for each dimension both case by case and across the pairs, with the intention of understanding the consequence of investing (or not) in the street environment.

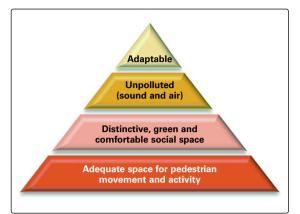


A holistic framework for analysis

The headlines

The research found that improvements to the quality of the publicly owned and managed street fabric in London's mixed streets (local high streets) return substantial benefits to their everyday users, and to the occupiers of space and investors in surrounding property in multiple ways. Across all cases these included:

- a one-third uplift in the physical quality of the street as a whole from interventions in the publicly owned street space;
- an uplift in office rental values equivalent to an 'additional' 4% per annum, helping to support investment in business space in these locations in the face of pressures to convert to more profitable residential uses;
- a larger uplift in retail rental values equivalent to an 'additional' 7.5% per annum, reflecting the more attractive retail environment that has been





A hierarchy of interventions

created and the encouragement that this is giving to investment in these locations in the face of online and out-of-town competition;

- a strongly related decline in retail vacancy, leading to a sizable 17% per annum divergence in vacancy rates between improved and unimproved street environments, alongside a greater resilience (against trend) of traditional (A1) and comparison retail, and a growth in leisure uses;
- an almost negligible impact on residential values, helping to counter concerns that street improvements, by themselves, will further inflate house prices and drive up pressures for gentrification;

'The most important level of intervention should involve improving the pedestrian experience'

- inconsequential impacts, from the street improvements alone, on traffic flows or the modal choices made by individuals when travelling (unless road capacity is deliberately removed as part of a scheme);
- a large 96% boost in static (standing, waiting, and sitting) and 93% boost in active (walking) street behaviours in improved over unimproved areas, with strong potential health benefits in the resulting more active lifestyles;
- a particularly large 216% hike in the sorts of leisure-based static activities (for example stopping at a café or sitting at a bench) that only happen when the quality of the environment is

There is a window of opportunity for high-quality streets

sufficiently conducive to make people wish to stay; and

 very strong perceptions among both everyday street users and local property occupiers that street improvement schemes significantly enhance street character, walkability, ease of crossing, opportunities for siting, and general street vibrancy.

A hierarchy of interventions

Collectively, the findings suggested that, to have most impact, viewing potential projects in terms of a hierarchy of interventions would be beneficial. The most important level of intervention, and the foundation for everything else, should involve improving the pedestrian experience by making adequate space for pedestrian movement and activity. This, of course, is even more a priority now, when streets are being managed to allow social distancing to be maintained. While the study did not explicitly single out cycling for analysis, we can confidently add other active travel modes of travel here as well.

Next comes the enhancement of social space, notably the creation of attractive and comfortable space for sitting, people-watching, socialising, and so forth. If we are to stand any chance of saving our high streets against the onslaught of online retail (on which we have all become so reliant during lockdown), then this is a critical priority over the short to medium term. Making our streets distinctive and pleasant places where people want to be is critical.

Finally come interventions relating to the creation of environmentally unpolluted (sound and air) and more adaptable spaces that can be used in multiple ways, with a good interplay between the street and ground-floor frontages. At the time of the research we felt that these would be the most difficult and challenging to achieve, although – as we have found over recent months – if people drive less, then these factors to a large degree take care of themselves. Certainly, as we move out of COVIDpeak and into a recovery period, having street space that can flex and which we can re-allocate as and when required has become vitally important. We need to continue flexing it away from the car.

A COVID silver lining

As summarised in the headlines already set out, the research strongly confirmed that improvements to the quality of the publicly owned and managed fabric of our mixed urban streets return substantial benefits to the everyday users of streets, to the occupiers of space and to businesses in surrounding properties in multiple ways.

In recent a letter to local authorities across London, the Department for Transport set out its priorities for bids to the newly created national Emergency Active Travel Fund, a fund directed at the creation of pop-up and temporary interventions focused on establishing an environment that is safe for walking and cycling, particularly given current restrictions on the use of public transport. The letter offers the following advice:

'We have a window of opportunity to act now to embed walking and cycling as part of new longterm commuting habits and reap the associated health, air quality and congestion benefits.'²

Such an approach from government is unprecedented, and while prompted by the extraordinary times in which we live, is very welcome indeed. Of course, temporary changes are one thing and permanent quite another. There is nevertheless the real prospect of securing a longterm health dividend from the short-term health crisis that we have been living through. We need to grab it and never let go!

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Notes

- M Carmona, T Gabrieli, R Hickman, T Laopolou and N Livingstone: Street Appeal: The Value of Street Improvements. University College London, for Transport for London, 2018. http://content.tfl.gov.uk/street-appeal.pdf
- 2 'Emergency Active Travel Funding Indicative Allocations'. Letter to Chief Executives and London Borough Transport Officers and Transport for London. Department for Transport, 28 May 2020. https://s3.amazonaws.com/lcc_production_bucket/files/ 13657/original.pdf?1590750305