**Is Liverpool (UK) ready to embrace green infrastructure and greenway practices? Rethinking the funding, management and spatial distribution of city’s greenspace network in an era of austerity.**

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**1. Introduction**

Changes in UK government since 2010 have placed economic pressures on the funding of urban greenspaces. These changes have led Local Planning Authorities (LPAs in the UK) to make difficult choices over what services they are required, legally and morally, to provide. Potentially the biggest loser in this process has been the funding for green and open spaces. Although a number of the cities have felt the impacts of fiscal austerity, Liverpool has been one of the city’s hardest hit. As a consequence, Liverpool City Council (LCC) is being forced to make decisions over how it will maintain the city’s landscape post 2016/17. Partially this reflects the fragmented nature *and* historical distribution of greenspaces in Liverpool but also the evolving development context of the city. Moreover, disparity in the distribution of the quality and quantity of green and open space is evident with a clear north-south divide in the (Sykes, Brown, Cocks, Shaw, & Couch, 2013). The growing rhetoric presented by LCC relating to funding discretionary service, including landscape planning, has thus been considered by as further evidence of the city’s lack of foresight in how it manages its environment.

To address these issues a series of greenways[[1]](#footnote-1), labelled as ‘*green corridors*’ throughout the paper, are proposed as a financially viable and spatially diverse mechanism to improve the spatial distribution of green infrastructure (GI) across the city. Using a city-wide analysis of existing green spaces the proposed green corridors aim to link Liverpool’s Victorian parks (hubs) with linear green spaces (links) to form a city-scale *green network*. However, despite local support for the protection of green and open spaces in the city, as observed in the Liverpool City Council Green & Open Space Review (LG&OSR), there is a reticence in some political circles to support such a programme of investment. By assessing existing barriers to funding investment in Liverpool’s green corridors it is possible to identify broader institutional problems with the financing, management and long-term development of green space planning. Moreover, within LCC there appears to be a lack of foresight of the socio-economic and ecological value of the city’s greenspaces, which is limiting discussions of how best to protect its landscape. Green corridors are also being proposed as a form of investment that facilitates greater spatial equity in terms of the provision of green spaces to communities in Liverpool. How LCC, and the city as a whole, approach the use of green corridors as a part of its GI network remains open to interpretation. The process of identifying possible locations for new green infrastructure corridors is the first stage in generating political/public support for investment.

**2. Background/Literature Review**

The post-2010 austerity measures instigated by the UK government have led to significant cuts in LPA funding. Within Liverpool the local government has witnessed a 58% cut in central government funding since 2010/2011 (Liverpool City Council, 2015). Whilst other cities in the UK have seen similar cuts Liverpool appears to have felt the most significant cutbacks. These cuts have forced local government leaders to take stock of the services they fund, asking which services are a legal requirement (statutory services in the UK), and which can be cut back (discretionary services). Green space provision *is* adiscretionary service in the UK, meaning that LPAs have no legal requirement to fund/manage them. As a consequence across the UK green infrastructure is often perceived as being an easier service to withdraw compared to other social/community services such as adult/child social care. LCC are thus being asked to rethink their budgets to move away from a reliance on central government funding to more adaptive forms of financing. However, this situation provides opportunities to think innovatively about how public, private and community sources can be used to generate funding for capital expenditure and revenue spending (Mell, 2016).

**2.1. Alternative forms of funding**

As part of the LG&OSR an extensive review of green space funding mechanisms were investigated. These included existing *central/local government* options, i.e. Section 106 agreements, *community led opportunities*, i.e. community asset transfers, as well as, *private/developer* led proposals, i.e. corporate sponsorship (Liverpool City Council, 2015). Each of the options examined how the existing GI resource base could be utilized to attract additional funding. However, there are complex questions to be asked when attempting to raise funds from each of these options. Moreover, there are restrictions placed on LPAs in terms of their ability to set local taxes or to raise revenue funding from developer contributions (Cullingworth et al., 2015). Capital/revenue opportunities are also constrained by the political will of elected officials who may not want to raise costs in fear of losing political power. Similarly, developers have used ‘financial viability’ as a key argument for limiting contributions to service provision. Alternative funding options were debated in the LG&OSRB to illustrate whether they were viable/realistic for Liverpool, whether precedent for their use had been established elsewhere, and how they could be used within the institutional mechanisms of funding within Liverpool (see Table 1; Mell, 2016).

**Table 1. Funding GI investment in Liverpool**

|  |  |  |
| --- | --- | --- |
| **Financing** | **Benefits** | **Negatives** |
| *S106* | Existing process used by LPA to secure funding for specific investment related to obtaining development consent. Covers a range of investment options including built and green infrastructure. | Process of negotiation can be partial depending on the scale of the investment proposed, the client/developer, and the authority of the LPA to obtain the most appropriate level of funding for services. |
| *Sale* | Immediate financial gains from sales that can be used to fund capital and revenue services. | Short-term solution to funding as land holdings and the sale of assets can only draw on a finite level of resources. |
| *Local taxation* | Spatially inclusive approach to generate income from Council Tax and/or business rates. Can be used for identified infrastructure provision/services. | Unpopular with local people and the business community and can be difficult to approve in LPAs due to government restrictions. Also difficult to allocate specific taxes to identified service provision. |
| *Community Asset Transfer* | Provides communities with opportunities to take ownership of green spaces and decreases the financial and legal responsibilities to LPAs. | Communities are often unaware of the financial, legal and managerial responsibilities of ownership. Enthusiasm for ownership can diminish over time if the composition of a group changes. |
| Sponsorship | Potentially significant funding from corporate sponsors with links to location. Positive publicity for sponsors with local communities, the LPA and other businesses. | Lack of desire to provide funding and questions over the amount of funding that might be provided. Potential conflict of interests being sponsors and future development in the city. |
| Sale and endowment | Gain of assets that can be used for development. Improvements in long-term financial viability through ownership of high quality development sites. | Initial costs of appropriation and the negative perceptions of the public to the sale of land to private businesses. |

**2.2. Alternative spatial form for Green Infrastructure**

The basic premise held in the GI literature, and in Liverpool, is that not all green spaces are of equal quality or quantity, however, that the cumulative value of green space can provide significant socio-economic and ecological benefits to a city (Mell, 2016). To investigate how the alternative forms of funding noted above could be applied in practice the LG&OSR proposed a series of investments in green corridors have been developed to test whether financing for strategic projects would gain more support than normative development. At present the financing of GI comes from a range of sources, for example Section 106 agreements, commuted sums, from community asset transfers or private sponsorship (Department of Communties and Local Government, 2012). However, funding is received piecemeal from individual development sites. The creation of the green corridors network aims to shift the emphasis away from single sites to a more strategic approach to funding. It was proposed that the strategic nature of the corridors could attract funds from a wider range of investments, similar to Community Infrastructure Levy (CIL) payments (Mell, 2012). Regional-scale investments, such as Liverpool Waters, could also aid this process, as larger project would deliver higher funding contributions compared to smaller sites.

Based on an evaluation of *where* existing corridors exist, *what* gaps could be identified, and *how* the current resource base could be visualized as a city-wide green network, the LG&OSR created a strategic network of green corridors for the city. The route of each corridor was designed to make best use of the existing of green spaces, Public Rights of Way (PRoW), and sustainable transport corridors. They were also developed to utilize *incidental* space and *brownfield* sites, as a way of re-establishing value to undervalued spaces. The proposal sought to use such spaces as they have been considered marginal in development conversations within Liverpool. Their use was seen as a mechanism which highlights to developers that brownfield sites could be seen as viable development sites when they are linked to the city-wide network. One of the key aims of this process was to ensure that the existing green spaces in Liverpool could be linked together to allow greater movement of socio-ecological resources within and across the city. Currently Liverpool has a poor network of cycle lanes, one-way streets and pedestrianized routes. The green corridors were thus reported as being a potential investment opportunity that could promote more sustainable forms of transport. They also offer cost-effective solutions of mobility pinch-points which currently limit safe non-motorized access to the city center (Liverpool City Council, 2015). An additional benefit of the proposed green corridors is that it addresses perceived spatial inequality within Liverpool. Many commentators have illustrated a north-south split which divide the city along socio-economic lines (Sykes et al., 2013). Although this assumption could be contested (cf. Liverpool City Council, 2015), one of the main aims of the green corridors is to link green spaces with linear routes in all wards to provide greater access to the landscape close to their homes[[2]](#footnote-2).

**3. Goals and Objectives**

The aim of this paper and the investment in green corridors in Liverpool is to explore the viability of investing in a series of city-wide greenways to improve the connectivity, accessibility and the functionality of the city’s infrastructure. This reflects on the ongoing discussions of greenway development and the possibilities afforded by their investment, as well as, the political/institutional and socio-economic barriers which limit their delivery.

**4. Method(s)**

An assessment of whether green corridors are a viable investment option is currently being discussed through the LG&OSR process. The LG&OSR interim report proposed a series of corridors that could be developed to improve access and connectivity to green space. The corridors were identified using GIS datasets including linear corridors (i.e. PRoW, cycle routes, and long-distance footpaths) to map existing resources, as well as deficits in the wider network. Further evidence was integrated from a city-wide site green space analysis to highlight proposed improvements in the connectivity of the green network. The location of each corridor has been linked to Liverpool’s network of Victorian parks which circle the city center and larger green infrastructure sites across the outer wards of the city. This has provided a dual spatial structure for the city in a ‘*Green Wheel*’ of three rings circling the center, the middle wards and the periphery, and spurs radiating from the center to the city’s boundary.

**5. Discussion**

The outcomes of the proposed green corridors in Liverpool are still unknown. Currently, the green corridor network is being consulted upon to assess whether local communities, developers and businesses would financially support investment in these networks. The network is also being discussed as part of the draft Local Plan preparations and it has been suggested that it will be used as part of the evidence base to support strategic GI investment across Liverpool. Below is an initial evaluation of these issues which will be extended over the coming years.

**5.1. Developing the green corridors**

A wide range of benefits have been discussed as being associated with the development of green corridors across Liverpool. These include the added social benefits of access to landscape resources, the ecological benefits of integrating habitats through linear corridors to form a supportive network, as well as the economic values of creating a more attractive, and therefore, viable development environment for investment. An initial assessment of the added-value that green corridors can provide is noted in Table 2[[3]](#footnote-3).

**Table 2. Benefits of investment in green corridors in Liverpool**

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| --- | --- | --- |
| **Social** | **Ecological** | **Economic** |
| - Access and connectivity  - New resources to use for local people, wildlife  - Sustainable transport  - Local engagement and informal management – social/civic responsibility  - Improved landscape/aesthetic quality (livability) | - Access and connectivity  - New resources to use for local people, wildlife  - Strategic corridors  - Climate change | - New resources to use for local people, wildlife  - Sustainable transport  - Climate change  - Local engagement and informal management – social/civic responsibility  - Improved landscape/aesthetic quality (economic uplift)  - Improved/viable development in the city due to higher quality environment/landscape |

**5.2. Institutional barriers to development**

A series of institutional barriers were also identified within the proposals for the green corridor network which may influence delivery and include: *a lack of political support to invest in green spaces/corridors*; *weak policy frameworks limiting the inclusion of green corridors in the Local Plan*; and *objections from developers who are unwilling to allocate funding and/or land for the development of corridors*. The lack of political will and a weak institutional planning framework are clear barriers to implementation. However, in Liverpool the support of the Mayor illustrates the potential for the recommendations of LG&OSR to be delivered (Liverpool City Council, 2015). Furthermore, the indication from LCC that the green corridors will be integrated into the draft Local Plan is evidence that LCC are promoting the creation of a connected, livable and (economically and socially) attractive city. The discussion of alternative funding mechanisms presented also offers possible solutions for LCC, as it provides a broad suite of public, private and community-based investment options that could be used to meet the long-term management needs of Liverpool’s GI. There is also a need to reflect upon whether sufficient land is available in public ownership to deliver the green corridors. Unfortunately, a number of pinch-points exist where land is currently in private/commercial ownership and as a consequence LCC will need to work with developers and land owners to ensure that connectivity between sections of the corridors can be delivered. Furthermore, where land is not in public ownership LCC could, and potentially will, enter into development negotiations to ensure that all growth is subject to developer contributions, i.e. S106, which can then be used to support investment.

**5.3. Local barriers to development**

In additional to institutional barriers there are potentially more localized issues which may impact upon the development of the green corridors. The two main issues are a lack of will within local communities to support investment if they are not economically or socially appropriate. Within communities in Liverpool there is history of mistrust of LCC and their development objectives which may influence engagement with the creation of green corridors. Therefore, although the proposed green corridors potentially offer a range of socio-economic and ecological benefits these may be undervalued in some areas. Secondly, there is potentially a lack of funding at a local neighborhood/ward level to facilitate in new landscape infrastructure. This reflects the difficulties that LPAs have when negotiating smaller developer contributions for GI projects, and the ongoing problems that LPAs have in raising capital/revenue funding to deliver projects (Mell, 2016). Neither of these barriers are insurmountable. Through continued engagement LCC can work with local communities to develop the rationale for the green corridors network as a more collaborative process of development. If undertaken successfully then LPA may be able to generate ‘buy-in’ from local communities in support of the project to ensure that even with a longer-term delivery timeframe that objections are not raised for its development. Furthermore, if the green corridors are adopted as part of the Local Plan they can be identified as a strategic investment which would place LCC in a stronger position financially, as it would require contributions from developers to fund the network. The spatial diversity of the project may therefore provide additional options for LCC to generate funding to deliver the project.

**6. Conclusion**

The reception of the LG&OSR highlights a positive response from LPA officers, elected officials and sections of the public to the proposed investment in a network of green corridors. Given the strategic nature of the network the LG&OSR has also proposed a series of funding mechanisms that could be used to provide financing for investment. Discussions within LCC have also highlighted the role that the proposed green corridors could play in assisting them to generate income from development to fund the network. This includes the potential for LCC to work with developers and house builders to ensure that development contributes to the wider creation and management of green and open spaces. Currently, the rhetoric coming from LCC is positive in terms of delivering ‘*Liverpool’s Green Wheel’* and looks set to continue despite of the difficult financial decisions being made.

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1. Throughout this paper greenways, green corridors, green spaces and green infrastructure (GI) are used interchangeably. Although each term has a grounded meaning the principles of connectivity, access, promoting multi-functionality, and diverse spatial distribution are common to all (Hostetler, Allen, & Meurk, 2011; Little, 1990). This paper uses GI as an overarching concept that includes greenways/green corridors and supports the notion that green spaces can be thought of as green network (Benedict & McMahon, 2006; Mell, 2010). Greenways are understood to act as the physical manifestation of GI providing linear/circular features that link different landscape features in a network (Fábos, 2004). [↑](#footnote-ref-1)
2. This reflects the view of English Nature and their Accessible Natural Greenspace Standards (ANGSt) which proposed specific radiuses and a time that people should be from sites neighbourhood, local, city and regional scale green infrastructure resources (Harrison et al., 1995). [↑](#footnote-ref-2)
3. This is not exhaustive. For an more extensive review of the values of greenways and green corridors please refer to the following: Benedict & McMahon (2006), Hellmund & Smith (2006), Jongman & Pungetti (2004) and Little (1990). [↑](#footnote-ref-3)