



‘EVERY TURN OF THE WHEEL IS A REVOLUTION’: TOWARDS THE DEVELOPMENT OF A CROSS-BORDER GREENWAYS AND CYCLE ROUTE NETWORK IN THE IRISH BORDER REGION



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The multiple socio-economic benefits ascribed to cycling are increasingly recognised by politicians and policymakers on the island of Ireland. Although a network of greenways and long-distance cycle routes are under construction in many urban and rural areas, harnessing the numerous opportunities in the Irish border region remains under-developed. To progress the development of cycling infrastructure in the border region, it is asserted that local and national policy frameworks require strengthening and integration; that strategic coordination and master-planning processes should be initiated; and, innovative funding mechanisms are needed to enable on-the-ground delivery. Improved cross-border connectivity is considered a critical component in realising the promised ‘cycling revolution’ on the island.

Introduction

In 2014, the then Northern Ireland Minister for Regional Development, Danny Kennedy MLA, promised to deliver a ‘cycling revolution’ in Northern Ireland following a fact finding-trip to Sweden and Denmark (BBC, 2014). The region presently compares unfavourably with Scandinavia and other places in continental Europe, particularly in the provision of a high-class cycling infrastructure and the concomitant creation of a cycling culture within the general population. For example, whereas the yearly spend on cycling in the Danish city of Copenhagen is approximately £20 per person, the equivalent spend by the Department for Regional Development (DRD) in Northern Ireland is 55 pence per person (McKibbin,

2014a: 3). The extremely low levels of walking and cycling in Northern Ireland contrasts markedly with the overwhelming dependency on the private car, the usage of which is considered ‘habitual, convenient and normal’ for everyday transportation needs (McKibbin, 2011: 1). Similar patterns are repeated in Ireland, where recent census figures suggest that the combined modal share for walking, cycling and public transport usage amongst the population fell from 34 per cent in 1991 to 24 per cent in 2011 (Department of Transport, Tourism and Sport, 2014: 6). Indeed, the number of those cycling to their place of employment in Ireland was 1.9 per cent in 2006, in comparison with 5.9 per cent in 1986 (Manton & Clifford, 2011: 2). The implications of these trends for the environment, economy and health and well-being will be significant if left unchecked, and not in a way conducive to improving socio-economic and environmental indicators.

Policymakers on the island of Ireland have evidently accepted within the last decade that both jurisdictions needed to pursue a radically different approach to cycling in order to address these negative trends. The publication in 2009 of *Ireland’s First National Cycle Policy Framework* by the Department of Transport heralded a new policy approach, while the successful staging of the Giro d’Italia Big Start in 2014 also highlighted the potentially lucrative cycling tourist market that is presently under-developed locally. However, in spite of these encouraging signs, the development of cycling on the island of Ireland, for the present, remains an evolutionary process rather than a revolutionary one. For instance, the implementation gap between policy and practice in the delivery of much-needed physical infrastructure, such as greenways and segregated cycle routes, ensures that the infrastructure deficit remains the principal barrier to the creation of a more vibrant cycling culture (Fáilte Ireland, 2007; Manton & Clifford, 2011; McKibbin, 2011; Caulfield, 2014). Furthermore, certain cycling policies are rather limited in their geographic reach, prioritising urban areas in the case of *Changing*



Gear: A Bicycle Strategy for Northern Ireland, while arguably too narrowly focused on achieving a modal shift from private cars (McClelland, 2014; Committee for Regional Development, 2015; Department for Regional Development, 2015). As McClelland (2014: 9-10) argues, policymakers should explicitly adopt 'an inclusive and all-embracing approach' to the provision of cycling infrastructure aimed at 'commuter, recreational, tourist and other types of cyclist' in urban and rural areas, thereby accommodating 'the multiple outcomes toward which greenways and cycle routes can contribute'. Perhaps more pertinently, from the perspective of cross-border cooperation in this area, a coordinated approach to the long-term development of cycling infrastructure in the Irish border region has yet to be elaborated by government.

The purpose of this paper is to outline a number of recommendations aimed at supporting the development of a comprehensive cross-border network of greenways and cycle routes in the Irish border region. These recommendations are principally derived from a recent review of the academic and policy-based literature relating to cycling in Ireland and Northern Ireland by the International Centre for Local and Regional Development (ICLRD), which culminated in the publication of *Cross-Border Greenways and Cycle Routes on the Island of Ireland: A review of policies and future opportunities in the development of a regional network* (McClelland, 2014). The paper begins by briefly reflecting on the multiple socio-economic benefits typically associated with cycling, before moving on to discuss the improved institutional and policy environment that is emerging on the island of Ireland. The findings of the cycling policy review are subsequently outlined, with particular emphasis on the creation and promotion of a cross-border network of greenways and cycle routes. The review was carried out under the auspices of the Cross-Border Spatial Planning and Training Network (CroSPlan II) programme managed by the ICLR, and funded by the Special EU Programmes Body (SEUPB) under INTERREG IVA.

Reiterating the multiple benefits of cycling

It is unnecessary to elaborate in great depth the multiple benefits typically ascribed to cycling within the policy and academic-based literature. Indeed, the cross-cutting contribution that cycling can make to achieving multiple public policy goals, and towards ensuring better outcomes for a wide range of citizens, is reinforced in much of the literature, and is not just confined to the lobbying outputs of cycling advocacy groups. For instance, the provision of infrastructure and facilities to encourage activities such as cycling and walking is shown to improve the physical and mental health of the population (West & Shores, 2011; Starnes *et al.*, 2011; Lee & Maheswaran, 2011; Rojas-Rueda *et al.*, 2013; Dallat *et al.*, 2013). This is particularly important in the context of what Kohl *et al.* (2012) call the global 'pandemic of physical inactivity', with 53 per cent of adults in Northern Ireland, according to the Chief Medical Officer (cited in Committee for Regional Development, 2014a), not currently meeting the physical activity guidelines. In relation to the environment, cycling is considered the 'ultimate "zero carbon" and environmentally friendly solution' for personal transportation (Chapman, 2007: 363), leading to a reduction in the use of private cars and congestion, and a concomitant lessening in greenhouse-gas emissions (Lumsdon, 2000; Weston & Mota, 2012; Manton & Clifford, 2013). Furthermore, the provision of greenways can safeguard important habitats, provide corridors for wildlife and people, while reinvigorating underused and historic transport infrastructure such as canal towpaths and old railways beds (Lumsdon, 2000; Mundet & Coenders, 2010). It is also asserted by McClelland (2014) that greenways and cycle routes, in both urban and rural areas, can contribute towards the 'shared space' agenda promoted by government in Northern Ireland. This is supported by the experience of the Great Western Greenway, which has acted as a 'social' and a 'tourism corridor' since its opening, thereby promoting community relations by uniting 'small towns and villages in the vicinity' (Robinson & O'Connor, 2013: 311).

All of the above benefits are all intimately linked of course, particularly in relation to the multivariate financial contribution that cycling can make to the local economy, which is the primary focus of much of the contemporary



literature. For example, Henrikson *et al.* (2010) consider the financial saving for employers derived from reduced rates of absenteeism amongst cycling commuters, in comparison with their non-cycling colleagues. The cost effectiveness of investment in cycling infrastructure *vis-à-vis* other health-related spending is favourably referenced by Kohl *et al.* (2012), Dallat *et al.* (2013) and Deenihan & Caulfield (2014), particularly concerning the use of the World Health Organisation's (WHO) Health Economic Assessment Tools (HEAT)ⁱⁱ. However, the most prominently discussed economic benefit relates to the tourism revenue generated, an area within which both jurisdictions on the island of Ireland are presently underperforming (Manton & Clifford, 2011; Committee for Regional Development, 2015). The existence of a good cycling infrastructure, particularly in rural areas, has the capacity to develop the local tourism industry, making it less seasonally dependent; to enhance existing tourism attractions through improved connectivity; and often representing an additional visitor attraction in its own right (Lumsdon, 2000; Mundet & Coenders, 2010). The European cycle tourist industry was estimated to be worth €54 billion (Lumsdon *et al.*, 2009: 8), with cycle tourists representing a much sought after, and high-spending, segment of the market, particularly from Germany (Lumsdon *et al.*, 2009; Downward *et al.*, 2009; Meschik, 2012; McKibbin, 2014b). Indeed, the potential value of cycling to the Irish tourism industry has already been demonstrated by the opening of the Great Western Greenway, which attracted a €7.2 million spend in the local economy in 2011, €2.8 million of which came from approximately 8,000 overseas visitors (Fitzpatrick Associates, 2011; Deenihan *et al.*, 2013). Replicating this success, including on a cross-border basis, would contribute to bolstering the local economy, bringing economic opportunities to rural areas often bypassed by tourism and other forms of industry.

The development of cycling infrastructure, and the creation of a vibrant cycling culture, are not unproblematic objectives, however, and various challenges and potential trade-offs are identifiable within the literature. For example, recent research in Ireland suggests that a modal shift of 115 commuters per year from private cars to bicycles is required in order to offset the carbon

footprint of constructing one 10km asphalt greenway (Manton *et al.*, 2014, p.3). In other words, the reduction in carbon emissions is dependent upon achieving critical mass in behavioral change. Furthermore, the attraction of foreign cycling tourists to a particular destination is closely related to the facilities on offer, with the availability of long-distance greenways and segregated cycle routes key to unlocking the cycling tourist market in Europe (Downward *et al.*, 2009; McKibbin, 2014b; Deenihan & Caulfield, 2014). The creation and promotion of the EuroVelo network by the European Cyclists' Federation (ECF), with two routes crossing the island of Ireland – the Atlantic Coast Route (EuroVelo 1) and the Capitals Route (EuroVelo 2) – is testament to this fact (see Figure 1). Overcoming negative perceptions of the weather as an inhibiting factor to increased outdoor cycling and walking is also a challenging local issue, albeit weather can be construed as both a 'product of both environmental forces and socio-cultural interpretation' (Prior *et al.*, 2014: 79). The most problematic issue in the development of cycling relates to perceptions of safety, a factor which has a pronounced gender and age dimension, with younger males more likely to cycle to work or for recreational and touristic pursuits (Pucher & Buehler, 2008; Wegman *et al.*, 2012; Short & Caulfield, 2014; Committee for Regional Development, 2015). The provision of segregated routes is the decisive decision-making factor for many individuals and groups of people, including families and tourists, as to whether they feel safe cycling (Caulfield *et al.*, 2012; Aldred, 2015; Aldred *et al.*, 2015; Deenihan & Caulfield, 2015). This, and the other issues briefly outlined above are not insurmountable and, ultimately, relate to the choices that policymakers and politicians must make in the context of the prevailing evidence, and the outcomes that they are seeking to achieve.

An improving institutional and policy context on the island of Ireland

The policy context for cycling on the island of Ireland has undoubtedly improved over recent years and the numerous photo opportunities that cycling-related announcements have afforded politicians in this period attests to its increasing visibility on the political agenda.



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Figure 1: The European cycle route network (EuroVelo)



(Source: www.eurovelo.com/en/eurovelos)

Northern Ireland

The DRD (soon to be renamed the Department for Infrastructure) is the principal policymaker and institutional sponsor for cycling in Northern Ireland, in addition to its wider remit covering strategic spatial

planning and transportation. The DRD published a range of policy documents since the turn of the millennium specifically focused on cycling, or referencing it positively as part of a suite of other policies dealing with regional development, sustainable transport and



active travel. In respect of the latter, the most important publications are the *Regional Development Strategy 2035: Building a Better Future* (DRD, 2010), *Ensuring a Sustainable Transport Future: A New Approach to Regional Transportation* (DRD, 2013a) and *Building an Active Travel Future for Northern Ireland*, together with its associated *Action Plan* (DRD, 2012; DRD, 2013b). These documents are predominantly strategic in their outlook, containing high-level aims and objectives that are broadly supportive of cycling and other forms of sustainable transport, and which emphasise the necessary interdependencies with other government policies and strategies. The *Northern Ireland Cycling Strategy*, published in 2000, was, for many years the most pertinent policy document solely occupied with cycling, which envisaged the quadrupling of the number of bicycle trips by 2015 (DRD, 2000). The outcomes, however, were poor, with the number of trips achieved being 'well below' the targets established in the Strategy (McKibbin, 2011: 4). The evidence suggested that a sustained and better-resourced effort was required to fundamentally alter the balance between private and sustainable forms of transport in Northern Ireland.

In part response, a dedicated Cycling Unit was created within the DRD in 2014 with the aim of developing and promoting the bicycle 'as an everyday mode of transport for everyone in Northern Ireland' (Northern Ireland Executive, 2014). An early intervention by the Cycling Unit saw the introduction of a *Draft Bicycle Strategy for Northern Ireland* for public consultation, with comments invited by the end of November 2014ⁱⁱⁱ. The resulting strategy, *Changing Gears: A Bicycle Strategy for Northern Ireland*, seeks, over a 25-year horizon, to establish a "community where people have the freedom and confidence to travel by bicycle for every day journeys" (DRD, 2015: 8). A 'three-pillar' approach – 'build-support-promote' – is proposed to achieve this, involving the provision of cycling infrastructure, supportive measures dealing with such concerns as safety and security, and promotional activities centered on flagship events and responsible cycling (DRD, 2015). The Strategy recognises that there are differences between using the bicycle in an urban area and in a rural area; with the opportunities and challenges presented by each requiring investment. Importantly,

the Strategy makes a commitment to support local authorities in the development of additional Greenways throughout Northern Ireland where possible; recognising that greenways offer the potential to link housing areas, schools and amenities – as well as being a valuable tourist attraction. The Strategy sets clear targets for 2025 and 2040 and makes a commitment to carry out regular evaluations to measure the extent to which these are being achieved.

The creation of the 11 new local authorities in April 2015, and their acquisition of a range of planning, regeneration and tourism-related powers previously held at central government level in Northern Ireland, arguably provides a significant opportunity to progress cycling initiatives at the local level. The impact of the former local authorities was limited in this space, although several cycling initiatives in recent years were led by, or involved, local authorities, including those referenced in *An Action Plan for Active Travel in Northern Ireland* (DRD, 2013). This includes the provision of greenways, cycling and walking routes under the Sustrans Connect 2 project in Omagh and the Derry City Council Active Travel Programme, while Armagh City and District Council also completed a project linking Armagh city centre, the two cathedrals and the Mall area with the historic Palace Demesne (Northern Ireland Executive, 2013). However, in contrast to their counterparts across the border, as seen below, the development plans prepared by the Department of the Environment for the former council areas contiguous with the border are significantly out-of-date. Indeed, as McClelland (2014) underlines, the *Banbridge/Newry & Mourne Area Plan 2015* is the only one that remains within its intended period of operation, and it was adopted a mere two years before its expiration date. The new local authorities are responsible for development planning, providing greater scope for policy formulation and innovation in practice in the development of cycling infrastructure, in addition to facilitating the 'up-to-dateness' of local development plans.

Although the cycling charity Sustrans is not a public body or institutional actor, it has been central to many of the positive cycling developments that have occurred in Northern Ireland in the past several decades, particularly



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in the development of the National Cycle Network (NCN). The NCN in Northern Ireland extends over some 1000 miles of both on, and off-road, routes, including the Newry Canal Towpath (NCN Route 9), Comber Greenway (NCN Route 99) and the Foyle Valley Cycle Route (NCN Route 92). A number of trails were also developed on a cross-border basis, with the 230-mile Kingfisher Cycle Route (NCN Route 91) the first to be mapped and signposted on the island of Ireland. Sustrans will undoubtedly remain an important stakeholder, partner and potential implementation-body in relation to cycling in Northern Ireland and the Irish border region.

Ireland

In Ireland, the Department of Transport, Tourism and Sport (DTTAS) has been the primary institutional sponsor for cycling, responsible for the publication and implementation of *Smarter Travel – A Sustainable Transport Future and Ireland's First National Cycle Policy Framework*. The former seeks, amongst other things, to reduce work-related commuting by car from 65 per cent to 45 per cent, while the latter focuses exclusively on measures to promote the development of walking and cycling in Ireland. A number of other public agencies and bodies are very active in this space and have published their own reports focused on the development of cycling in Ireland. This includes the introduction of the National Roads Authority's (NRA) – now known as Transport Infrastructure Ireland^{iv} - *National Cycle Network, Scoping Study* in 2010, as well as Fáilte Ireland's *A Strategy for the Development of Irish Cycle Tourism* in 2007, both of which visualise the creation of an Irish National Cycle Network. The Irish Sports Council's National Trails Office is engaged in promoting the creation and use of recreational trails, while the National Transport Authority (2011) published design standards for cycling lanes and associated infrastructure and facilities. Such diversity of output by multiple government agencies contrasts with Northern Ireland, where, for example, the Northern Ireland Tourist Board (NITB) has been criticised for the continued absence of a cycling tourism strategy, publication of which the Committee for Regional Development (2015, p.6) considers 'a matter of urgency'.

Local authorities in Ireland have also been actively integrating cycling policies into their respective county development plans, while progressing the development of greenways and cycle routes on-the-ground in tandem with other public bodies and agencies. A suite of development plans for the border counties have recently been adopted or are in draft form, and, as Table 1 indicates, each plan identifies a range of existing and proposed cycling routes. In addition, all of the plans positively link cycling with an array of public policy arenas, including tourism development, farm diversification, sport and recreation, health and wellbeing, a reduction in greenhouse gas emissions, air quality, and a modal shift from private cars. Further policies relate to the promotion of cycling, parking provision for cyclists, road safety issues, and the necessity to improve mobility on routes for those with disabilities. From a practical point-of-view, local authorities have also been to the fore in advancing greenways and cycle routes in Ireland. For instance, Mayo County Council and Waterford County Council led on the development of the Great Western Greenway and the Deise Greenway respectively, while Louth County Council and Monaghan County Council recently completed sections of the Ulster Canal Greenway and the Carlingford to Omearh (Eastern) Greenway as part of longer proposed routes.

Cross-border on the island of Ireland

Cross-border cooperation on the island of Ireland is growing in the areas of spatial planning, infrastructure development and environmental protection. The publication of the *Framework for Cooperation: Spatial Strategies of Northern Ireland & the Republic of Ireland* in 2013 by the DRD and the Department of Environment, Community and Local Government (DoECLG), in theory enhanced the prospects for cross-border cooperation in spatial planning. The Framework makes no specific reference to greenways or cycle routes, but the importance of 'cost effective and environment friendly infrastructure', and the 'careful conservation and enhancement of shared natural and cultural heritage assets', is underlined (DRD & DECLG, 2013: 27-28). Multiple strategy and policy documents in both jurisdictions refer to the potential development of greenways and cycle routes, including the *Regional Development Strategy 2035* (DRD, 2010), the *Regional*



Table 1: Existing/proposed greenways and cycle routes identified in county development plans

Local authority plan	Existing/proposed greenways and cycle routes
<p>Cavan County Development Plan 2014-2020</p>	<ul style="list-style-type: none"> • NCN Cavan Leitrim Greenway – <i>proposed</i> • NCN Boyne Valley to Lakelands County Greenway and associated looped Kingscourt Greenway – <i>proposed</i> • NCN SLNCR (The Sligo Leitrim North Counties Railway Greenway) from Enniskillen to Sligo – <i>proposed</i> • NCN Cavan Lakelands Cycle Loop extending from Cavan Town to Killashandra Village – <i>proposed</i>
<p>Louth County Development Plan 2015-2021</p>	<ul style="list-style-type: none"> • Eastern Greenway – <i>partially complete</i> (Phase 1 Carlingford-Omeath) • NCN Dundalk to Sligo (Route 1) – <i>proposed</i> • NCN Dundalk to Wexford (Route 5) – <i>proposed</i> • NCN Drogheda to Trim (Route 3) – <i>under development</i> • Brú na Boinne Greenway Drogheda to Mornington – <i>partially complete</i>
<p>Leitrim County Development Plan 2015-2021</p>	<ul style="list-style-type: none"> • Sligo to Enniskillen route along railway line (NCN SLNCR) – <i>proposed</i> • NCN Sligo to Dundalk (Route 1) – <i>proposed</i> • NCN Limerick to Carrick-on-Shannon (Route 11) – <i>proposed</i> • NCN Carrick-on-Shannon to Mullingar (Route) – <i>proposed</i> • Dromod to Mohill and Ballinamore route along railway line – <i>proposed</i> • Kingfisher Cycle Route – <i>existing</i> • North West Trail – <i>existing</i> • <i>Tour De Humbert</i> Trail – <i>existing</i>
<p>County Donegal Development Plan 2012-2018</p>	<ul style="list-style-type: none"> • North West Cycle Trail – <i>existing</i> • Inis Eoghain Cycleway – <i>existing</i> • Ballyshannon to Ballycastle – <i>existing</i> • Foyle Valley Cycle Route – <i>existing</i> • The Gap Trail (Ardara/Glenties) – <i>existing</i>
<p>Sligo County Development Plan 2011-2017</p>	<ul style="list-style-type: none"> • Strandhill, Rosses Point, Ballysadare and Collooney to Sligo City routes – <i>proposed</i> • Claremorris to Collooney route along railway line – <i>proposed</i>
<p>Monaghan County Development Plan 2013-2019</p>	<ul style="list-style-type: none"> • Kingfisher Cycle Route – <i>existing</i> • Ulster Canal Greenway – <i>existing and proposed</i>

(Source: adapted from McClelland, 2014: 40)



Planning Guidelines (2010-2022) for the Border Region (Border Regional Authority, 2010), and *Smarter Travel – A Sustainable Transport Future* (Department of Transport, 2009b). The *Bicycle Strategy for Northern Ireland* and *A Strategy for the Development of Irish Cycle Tourism* both briefly reference cross-border cooperation, but the still extant *Northern Ireland Cycling Strategy* and *Ireland's First National Cycle Policy Framework* fail to do so, suggesting a somewhat intermittent focus by policymakers on this issue. At the local government level the picture is more straightforward, with each of the local county development plans indicated in Table 1 positively referencing cross-border cooperation on cycling infrastructure. The policy environment, therefore, is broadly conducive to progressing cooperation in this area, although it remains an emergent concern of policymakers in need of accelerated and more detailed elaboration.

Cross-border cooperation between the various government departments, agencies and the cross-border implementation bodies on the development of cycling infrastructure is also an emergent activity. For example, a representative from Waterways Ireland is included on the National Trails Advisory Committee in Ireland, while the possibility of a DTTAS official joining the recently established DRD Greenways Working Group in Northern Ireland was recently mooted (North South Ministerial Council, 2014). Arguably the most prominent example of cooperation between the respective government departments to date concerns the inclusion of a Sustainable Transport theme in the SEUPB's INTERREG funding programme for the period 2014-2020, including for the 'development of a comprehensive crossborder cycle network' (SEUPB, 2014: 16). Only a percentage of the £40 million initially allocated under this theme will be directed towards cycling, but its inclusion in the programme was supported by the intervention of DRD officials, together with their colleagues in Ireland and Scotland (Committee for Regional Development, 2014b). At the local government level, engagement on this issue is already taking place amongst a number of local authorities, including under the auspices of the Memorandum of Understanding between Louth Local Authorities and Newry, Mourne and Down District Council. The further progress of the Ulster Canal

Greenway also featured in recent discussions between Monaghan County Council and Armagh City and District Council (now Armagh City, Banbridge and Craigavon Borough Council). The completion of the reform of local government will undoubtedly bolster the potential for further cooperation given the increasing alignment of planning and other functions on either side of the border.

Progressing the development of a cross-border network of greenways and cycle routes

The creation of cycling infrastructure on a cross-border basis will depend on the sustained intervention of government and other stakeholders. A number of recommendations made by McClelland (2014) provide some guidance on the sort of intervention required to progress this agenda over the medium-long term. Firstly, policy references to the development of cross-border cycling infrastructure should be more explicitly reinforced in national/regional and local level policy documents in both jurisdictions on the island. This includes within the local development plans introduced by the new local authorities in Northern Ireland, the Local Economic and Community Plans (LECPs) nearing completion by southern local authorities, the future reworking of specific cycling policy documents, and the forthcoming replacement for the *National Spatial Strategy* (NSS) in Ireland. However, reinforced policy references should also be accompanied in practice by joined-up and integrated land-use planning and transport strategies, which should be complementary and positively reinforcing. The evidence from continental European countries, particularly the cycling success stories of the Netherlands, Germany and Denmark, suggests that the development of cycling requires an integrated approach to spatial and transport planning and the 'coordinated implementation of [...] [a] multifaceted, mutually reinforcing set of policies' through strict land-use planning systems (Pucher & Buehler, 2008: 495). This inevitably requires a mixture of 'carrots' and 'sticks' aimed at achieving behavioural change. That such a preferential situation does not yet exist on the island of Ireland is recognised (see, for instance, DTTAS, 2014; Committee for Regional Development, 2015). Acting on a cross-border basis arguably exacerbates the challenges faced by those politicians and policymakers striving for a more joined-up approach within their own



jurisdiction. Nonetheless, for the full benefits of cycling to be fully realised, particularly in rural areas that have not tangibly benefitted from tourism or sustainable rural development, it is essential that the key stakeholders in the Irish border region coordinate their approaches to constructively address the issues at hand.

Secondly, rather than the piecemeal and uncoordinated approach that characterises the present state of play in the Irish border region, it is asserted that a master-planning process for the development of greenways and cycle routes should be initiated to guide strategic decision-making over the long-term (McClelland, 2014). Furthermore, a coordinating body/mechanism should be identified (or created) to prepare for, and implement, a coherent strategy and masterplan, bringing together the key stakeholders from central and local government, in addition to non-governmental actors such as Sustrans. The North South Ministerial Council's (NSMC) role in cross-border cooperation on transportation is noted favourably by the DTTAS (2009b), while the ongoing work of Waterways Ireland is similarly instructive, particularly given the potential usage of canal towpaths for cycling and walking. Local authorities will remain critical to the delivery of greenway projects on both sides of the border, and the former DRD Minister noting in May 2015 that councils in Northern Ireland will primarily be responsible for their development, similar to their counterparts in Ireland (Northern Ireland Assembly, 2015). A number of prominent opportunities undoubtedly exist for the provision of high-quality cycling infrastructure on the island of Ireland, whether utilising the Ulster and Newry canals or following the route of disused rail lines such as the Sligo Leitrim Northern Counties Railway (SLNCR). Proposals for these routes are at various stages of implementation or elaboration (as outlined in part in Table 1), and GIS-based mapping work has been undertaken by the Irish Trails Office and others to visualise what a comprehensive network might look like.

Finally, the critical issue of finance for capital intensive developments such as greenways and long-term cycle routes is clearly problematic at a time of pressurised public finances. The *Declaration of Madrid* promotes the creation of a 'European Green Network' and articulates

the necessity for 'permanent funding lines for planning, construction, promotion and maintenance of greenways', including investment from the private sector backed by 'strategies of corporate social responsibility' (European Greenways Association, 2010: 3). This suggests the need to explore a diverse range of potential funding sources, whether from central and local government, European funds, the lottery and other major sponsors of charitable causes, in creating a financial cocktail sufficient to develop quality cycling infrastructure. The use of tax incentives, the philanthropic activities of multinational corporations, and harnessing more innovative means of financing, such as online 'crowdfunding', should also be encouraged to maximise long-term impact. Indeed, rather than pursuing a competitive approach to the allocation of scarce resources, it is asserted that conceiving of the creation of greenways and cycle routes as a long-term objective, facilitated by a coordinated master-planning process, is more likely to ensure collaboration across the region in delivering a comprehensive network for the mutual benefit of everyone. This might ultimately assist in overcoming some of the local objections to the development of cycling infrastructure experienced to date in certain locations in Ireland.

Conclusions

Hanna (2014: 288), examining the history of cycling in Dublin in the period 1930-1980, informs how cyclists were effectively 'rendered invisible in planning the city after 1960', when traffic engineers and planners were preoccupied with catering for the private car in the built environment. Such attitudes were common in urban and rural areas on the island of Ireland in this time period and contrast markedly with the pro-cycling measures reinforced over many decades in other European countries (McKibbin, 2014a). As discussed above, present-day policymakers and planners are increasingly adapting the concerns of cyclists into their policies, plans and practices, supported by a plethora of data evidencing the multiple socio-economic benefits that can be accrued. Much more could be done to resource and implement this 'cycling revolution' on the ground in both jurisdictions, but the direction of travel appears favourable, with a weight of public expectation increasingly driving political opinion towards positive



intervention. For instance, the growth in individual membership of Cycling Ireland, from 5,600 in 2009 to 23,000 in 2014, attests to the burgeoning interest (Cycling Ireland, 2014: 5). Nonetheless, the potential for cross-border cooperation in this area is in its infancy, and

the type of greenway and long-distance cycling routes needed to drive a modal shift from the private car, and attract high-value cycling tourists, remain largely on the drawing board at present.

Figure 2: Cycling-themed mural on The John Hewitt bar in Belfast's Cathedral Quarter



(Source: Andrew McClelland)

For the Irish border region to capitalise on these opportunities, policy frameworks require strengthening and integration; strategic coordination and master-planning processes should be initiated as a matter of urgency; and, the identification of long-term and innovative funding mechanisms are deemed a prerequisite to creating a comprehensive network. As the Belfast mural above illustrates (see Figure 2), every turn of the wheel may represent a revolution of sort, but the pace of developments on the island of Ireland needs

quickenning if cycling is to reach its full revolutionary potential.

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SEUPB INTERREG-funded cross-border spatial planning projects on the island of Ireland, in association with the International Centre for Local and Regional Development (ICLRD) and the Centre for Cross Border Studies (CCBS). Andrew holds an MA in Town and Country Planning from the University of the West of England, Bristol and was awarded his Doctorate from Ulster University in June 2014. His research and consultancy interests include planning and architectural history, public policy and cross border cooperation on the island of Ireland. In September 2016, Andrew will be taking up a Marie Skłodowska-Curie Fellowship at Maynooth University.

Endnotes

- i CroSPlaN II formed part of the wider Ireland-Northern Ireland Cross-Border Cooperation Observatory (INICCO II), led by the Centre for Cross Border Studies (CCBS) in Armagh.
- ii See www.heatwalkingcycling.org.
- iii In light of the comments received during the public consultation exercise, the DRD intimated that substantial changes would be made to the Strategy prior to its publication. The Consultation Report on the *Draft Bicycle Strategy for Northern Ireland* can be found here: <http://www.drdni.gov.uk/consultation-report-on-the-draft-bicycle-strategy.pdf>.
- iv Transport Infrastructure Ireland came into being in August 2015 following the merger of the National Roads Authority with the Railway Procurement Agency.

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