

Cycling Scotland

Cycling Scotland: The Second CAPS Progress Report



June 2016

Second CAPS Progress Report

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Cycling Scotland's vision is a sustainable, inclusive and healthy Scotland where anyone, anywhere can enjoy all the benefits of cycling. The organisation receives grant funding from Transport Scotland to promote cycling and Cycling Action Plan for Scotland actions.

Executive Summary

- In 2010, the first ever Cycling Action Plan for Scotland (CAPS) established the vision that 10% of everyday journeys in Scotland would be taken by bike by 2020. Two years later, a progress report by Cycling Scotland recommended a ‘refreshed’ policy framework, subsequently introduced by Transport Scotland as CAPS 2013. This latest progress report has been undertaken by Cycling Scotland in anticipation of a second CAPS update before the end of 2016. With only four years left to go under the current vision delivery timeframe, the report marks a defining moment.
- The 2016 progress report provides an evidence-based assessment of CAPS progress to date. It also makes recommendations for achieving rapid modal shift to cycling, based on the most recent statistical data, examples of best practice in Scotland, stakeholder consultation and evidence of change taken from other European countries.
- The vast majority of stakeholders indicated that the publication of CAPS in 2010 and 2013 represented a positive development. Broadly speaking, the ‘value’ of CAPS was measured in both practical (funding; local strategies) and symbolic terms (profile; focus; vision). The evidence from elsewhere in Europe indicates that having a cycling policy framework is a pre-requisite for positive change but not enough on its own to bring about significant increases in cycling. To have the greatest impact, a national policy framework must be supported by funding at a national and local level with coordinated delivery at all levels.
- Funding from Scottish Government for active travel is at record levels and the headline message from stakeholders was that some progress had been achieved across most of the 19 actions in CAPS 2013. There was little agreement however regarding those areas representing most/least progress and it was clear there was no consensus on a single magic bullet to achieving the shared vision. Strategic development and programme delivery were found to vary hugely across the 32 Scottish Local Authorities. The case studies selected for this report provide useful examples of good practice for others to replicate and demonstrate that where investment is made, increased cycling follows.
- Cycling levels are increasing significantly but statistical data and stakeholder views indicate that the 10% vision, as currently measured, is unlikely to be achieved by 2020, the year marking the end of the current CAPS policy timeframe. The level of modal shift remains theoretically possible, but requires a rapid shift in resources and behaviour, with a modal shift to cycling at a speed not seen in evidence in any other country, at least when measured at a national level. This report recommends that the vision must be maintained to drive progress but additional milestones to measure success are required at a national and city level (where change can and should be more rapidly achieved).
- The focus should be for cycling to be promoted as an activity for anyone, irrespective of age, gender or income with everyday utility trips being the top priority. The evidence indicates that the greatest modal shifts at a population level are most likely to be achieved by a primary focus on short journeys in urban areas. The recommended ‘cycling for all’ approach means that other types of cycling (tourism, recreation, and sport) remain relevant to achieving the modal shift ambition. Given the primary focus on short journeys, objectives for increased modal share for cycling should make explicit the expected reduction in car travel with no conversion of walking journeys to cycling journeys.

- The report does not cover scenarios of different transport governance or funding arrangements or local government restructuring. What is clear is that, regardless of Scottish Government decisions in those areas, national and local commitment to, and funding for, cycling needs to take into account the health, environmental, especially related to climate change, economic and social costs of failing to change how we travel.

CAPS 2016 Pre-requisites for Success: A successful modal shift to cycling requires the following six pre-requisites for success being met:

- **A shared national vision for a 10% modal share of everyday journeys should remain**, with a related clear aspiration for reduction in car use, especially for short journeys, by both national and local government.
- **A long term increase in sustained funding is required**, with year-on-year increases over time towards a 10% allocation of national and council transport budgets as Edinburgh is achieving. The long term commitment to 2030 to dual carriageways between seven Scottish cities should be matched by an equally long term commitment to cycling if modal shift ambitions are to be met and sustained.
- The national 10% modal share vision should be supported by **local cycling strategies and delivery plans at council and regional levels. Local modal share objectives should be coordinated with the national vision to create a feasible route to 10%.**
- Cities will be the driver of significant modal shift **and the national vision should be directly coordinated with a specific focus on reaching at least 10% modal share in the cities and the largest urban areas, implementing best practice.**
- The primary investment focus should be on enabling cycling through **changing the physical environment for short journeys to enable anyone to cycle.**
- Government at all levels needs to **build and maintain staff capacity** to manage cycle infrastructure and the local road network in the present financial climate.

CAPS 2016 Activities: The following six inter-connected areas are where financial and human resources should be prioritised: 1) infrastructure; 2) training; 3) equity of access; 4) behavioural change; 5) safety and 6) communication & advocacy.

- **Build and maintain dedicated cycling infrastructure, enabling people aged 8-80 to cycle safely on coherent cycle networks in cities and towns.** This entails cohesive, seamless networks of on-road segregated routes in cities and links to existing off road networks. It also entails roll out of 20mph and there should be some provision of routes where demand will be greatest alongside trunk roads and busier local roads in rural areas.
- **Extend the reach of cycle training so that every school-aged child has the opportunity to learn to ride a bike safely and confidently.** Cycle training has been in place in countries such as the Netherlands and Denmark for many years. It is an important part of any cycling intervention but it is not a substitute for physical measures to make cycling both be and seem safer.
- **Prioritise programmes to ensure equity of access to bikes and cycling opportunities, regardless of age, gender and income.** Scotland lags behind other countries in terms of

access to bikes in Glasgow City for example, only 22.1% of the population have access to a bike.

- Ensure **new infrastructure is supported by promotional programmes to encourage people to change behaviour.**
- Deliver the 5 Es of **Education, Enforcement, Encouragement, Engineering and Evaluation to improve safety for people cycling.**
- **Develop a long term communication plan that represents cycling as something that anyone can do, not simply a minority.** A continuous and consistent campaign would aim to win ‘the hearts and minds’ of the public about the health, economic, environmental and social benefits of all forms of cycling.



1. Introduction

In 2010, the first ever Cycling Action Plan for Scotland (CAPS) established the shared vision that 10% of everyday journeys in Scotland would be taken by bike by 2020. Two years later, Cycling Scotland reviewed progress towards the goals of CAPS and suggested a ‘refreshed’ policy framework, subsequently published by the Scottish Government as CAPS 2013. Transport Scotland has confirmed its intention to publish a third CAPS at the end of 2016, and so it is anticipated that this second progress report will once again be used to inform future planning.

Time has moved on, of course. It is now four years since the last stock-take was completed, and there are only four years left to go under the 2020 vision timescale. This progress report therefore comes at a critical point for CAPS.

2. Progress Report Approach

In an ongoing commitment to an evidence-based approach, this second CAPS progress report draws on multiple sources and different perspectives:

- Stakeholder engagement: The views of stakeholders were gathered at the CAPS Delivery Forum, National Cycling Interests Group, Cross Party Group on Cycling and the Cycling Scotland Conference. Most recently, a targeted stakeholder consultation was undertaken, using a structured questionnaire to gather both quantitative and qualitative data. The questionnaire comprised eight questions in total, falling into two parts: Part A asked questions relating to progress to date in terms of achievement against CAPS 13 themes/action points and tackling known barriers: while Part B looked towards the future and aimed to identify future priorities and milestones. The consultation attracted 40 responses representing broad interests, including Local Authorities (LAs), Regional Transport Partnerships (RTPs), Public Bodies, professional associations, third sector organisations and tertiary educational institutions.
- 2016 Annual Cycling Monitoring Report: The publication of this report delivers CAPS Action 18 and brings together a huge range of objective data from different sources. As in previous editions, the 2016 report provides annual utility cycling statistics at national and local level as well cycling trends over time. It shows demographic information by age and gender, including bike ownership, and offers insight into the reasons why most people in Scotland choose not to cycle. It also monitors indicators relating to road safety and delivery of several CAPS projects (for example Bikeability or Stirling Bike Hub).
- Scottish Case Studies
The case studies included in this progress report, provide examples of best practice or noteworthy achievements in getting more people cycling. The fact that they are drawn from Scotland rather than further afield is important, for they bring learning and

experience, which might be more readily applied in similar contexts elsewhere in Scotland, and demonstrate that progress is already being made in specific sectors and areas achieving a greater modal share for cycling.

- European Comparator Report: This report was commissioned by Cycling Scotland and prepared by Urban Movement and the European Cyclists' Federation (ECF). It compiles evidence of change in cycling modal share in 5 European countries (Austria, Spain, Germany, Netherlands & Denmark) and examines the plans, policies and programmes which are thought to have contributed most to these changes. The findings offer useful lessons for Scotland.



3. The Impact of CAPS

The key message is that levels of cycling in Scotland are increasing significantly since the publication of the Cycling Action Plan for Scotland and Scottish Government funding for active travel is at record levels. The available monitoring data highlights the increases in cycling, varying significantly by location and journey purpose. The European Comparator Report found that having a national cycling policy was an essential pre-requisite for positive change; there appeared to be a correlation between having a national cycling policy and a higher position on the ECF Cycling Barometer (See Appendix 1). The same report also highlights that, although having a national cycling policy framework is a pre-requisite for positive change, it cannot on its own bring about increases in cycling.

The significance of a cycling policy framework was also acknowledged in the stakeholder consultation. The vast majority of stakeholders indicated that they welcomed the publication of CAPS in 2010, as well as subsequent reports and updates, and agreed that these collectively had had a positive impact on cycling levels.

Broadly speaking, the ‘value’ of CAPS was measured in both tangible and intangible terms. From a practical viewpoint, CAPS was seen as the catalyst for the release of central funding which was made available for onward investment in cycling-related initiatives. Responses indicated that national funding had in turn unlocked local investment, enabling a larger-scale programme of cycling initiatives than would otherwise have been possible. In addition to funding, it was also acknowledged that CAPS had led to the development of cycling strategies or Active Travel Strategies by both RTPs and LAs, as a complement to regional and local transport strategies.

The stakeholder view was that the greatest impact of CAPS was the symbolism of a desire to achieve more cycling. Most reported that CAPS had brought a profile and focus for promoting cycling in Scotland which they felt had been lacking up to that point. It also established a shared vision, although some questioned whether a target might have provided greater clarity to all stakeholders. Having an aspiration expressed in numerical terms was considered useful as a benchmark for tracking progress over time. However, and increasingly so, the 10% vision provided a stark reminder of the distance still to be travelled. Many respondents talked about the considerable gap between the ambitious vision and ‘on the ground’ progress, with a sizeable number of them expressing a view that the 10% ambition would not be achievable based on the current trajectory.

3.1 Progress on CAPS 2013 Actions

Stakeholders had several opportunities to rate progress on each of the actions in CAPS 2013. An analysis of the scores found that there had been at least some progress made on all 19 actions, though there was a lack of consensus around those areas representing most/least progress. Moreover, the commentaries which accompanied the scores in the targeted consultation indicated patchy or uneven progress across Scotland on a number of actions.

Table 1 is a summary of the comments made by stakeholders against each CAPS 2013 Action under its respective thematic heading. Where relevant, statistics from the 2016 Monitoring Report are shown in *italics*. It is worth noting that this presents stakeholder views without presenting a detailed context for each of the points.

CAPS 2013 Actions	Stakeholder Perception of Progress
Leadership & Partnership	
1. Establish an annual national cycling summit involving the Minister for Transport and local authority Heads of Transportation and relevant Committee Convenors, to lead delivery and gauge progress.	<p>Establishment of an annual national cycling summit involving the Minister for Transport was welcomed, and the fact that the meetings had happened was regarded as a positive start.</p> <p>Two main issues were raised: firstly, engagement in the process was thought to be disappointing, in terms of the numbers of LAs represented and the seniority of attendees. The general view was that this was symptomatic of the low priority afforded to cycling in LAs. Secondly, there were queries as to why meeting outputs had not been widely disseminated with the result that those not directly involved with the meetings did not know which matters were under discussion and what decisions had been made.</p>
2. Develop for each local area the strategic approach to supporting functional cycling (and active travel more broadly), mapping the appropriate infrastructure improvements required along with supporting promotional work to achieve tangible changes in travel choices.	<p>Evidence of steady progress, with most LAs reported to be currently engaged in some form of strategic development, supported by Transport Scotland funding for Sustrans. Specifically, this CAPS action has helped deliver route inventories and formulate actions to be taken to improve local cycle networks. The development of local strategies has also been a platform for stakeholder engagement and the establishment of local cycling fora to enable representation across transport, community planning, and health.</p> <p>However, there was evidence of a slow rate of change insofar as the majority of strategic plans so far in place had not yet resulted in tangible change on the ground, and the majority of plans remain in development.</p> <p><i>The 2016 Monitoring Report includes data from Sustrans that, as of 22 Dec 2015, 9 out of 32 LAs have a cycling strategy in place, while the remaining 23 have plans in development.</i></p>
3. Continue to promote a national training programme on cycling-integration design and best practice to planners, designers and engineers, through the delivery of accredited modules such as	Steady progress. Responses indicated that the take-up of training places by LA had been encouraging. Examples were also given of project funding being made conditional subject to applicants demonstrating that their planned work reflected current design guidelines. Accreditation of training courses and level differentiation were welcomed, although it was suggested that more use might be made of webinars and

<p>Making Cycling Mainstream, and promote the use of planning policy - Designing Streets, Cycling by Design cycle guidance and Smarter Choices, Smarter Places good practice.</p>	<p>online learning to widen participation and reduce costs. The current practice of embedding Sustrans staff into some LAs was reported to have raised local capacity.</p> <p>However, it was clear any impact was going to be long rather than short-term. Several respondents reported seeing little evidence of cycling being considered at earlier planning stages. There is not an instantaneous impact on the physical infrastructure (understandably). According to some, the training programme attracted sustainable transport professionals rather than traditional ‘roads’ engineers; and junior rather than senior staff, reducing the likelihood of generating significant attitudinal or behavioural change amongst key frontline staff in the short-term. There was also a view held by some that current design standards required updating to reflect best practice from continental Europe and Scotland and updated guidelines from the rest of the UK. Some suggested that guidelines should be made mandatory as minimum standards though this may be unlikely to be achievable in the current governance framework.</p>
Infrastructure, Integration and Safety	
<p>4. Continue to develop and maintain community links – i.e., high quality, local infrastructure to support active travel (routes and public realm improvements) particularly in urban areas where high levels of cycling can be achieved, along with associated infrastructure such as cycle parking facilities at key destinations including schools, bus and rail stations, shopping areas and workplaces.</p>	<p>Significant progress in terms of new cycle routes (and more segregated than before) and more destination parking. Some stakeholders judged development to be piecemeal and not always of a standard to meet CAPS aspirations or strategic aims. Examples of infrastructural development were cited: many of these were judged to be ‘stuck’ at development stage or not yet resulting in what could be called cycle ‘networks’. One campaigning group suggested that infrastructure was often delivered in places where it was most convenient rather than where it was most needed. The condition of the road network was also raised as a concern.</p> <p>Investment was considered critical. In this respect, the current level of public funding was deemed inadequate for achievement of the CAPS vision. The ability of LAs to match Community Links was a growing concern too in the present financial climate. Maintenance was a perennial challenge, with external funding sources of funding (e.g. Community Links) unable to be used for maintenance purposes. Consequently, maintenance of the cycling infrastructure was challenging, and work may be deferred until the situation reached a critical stage of degradation.</p> <p>Edinburgh City Council received many mentions as an exemplar of best practice in terms of its allocation (currently 9% and working towards target 10%) of its transport budget to cycling. Several LAs thought that more attention should be given to rural travel and access to the urban realm for those living in rural areas. End-to end journey planning and support for multi-modal travel were key considerations in this respect.</p>

	<p><i>See Section 2.13 in 2016 Monitoring Report. Sustrans data indicate additional km (NCN 123 km; Non NCN 152 km) of cycling and walking paths constructed, upgraded or resurfaced between April 2011 and April 2015 through the Community Links Programme.</i></p>
<p>5. Continue to develop and maintain the National Cycle Network to provide long distance cycling routes, connecting rural communities and promoting tourism.</p>	<p>Progress regarded as significant, with an important recent milestone being its inclusion within National Planning Framework 3. Use of the NCN had risen annually and new routes had been opened. Some comments were made regarding maintenance, including during the winter and in the more remote rural areas, and on the need to use roads in parts of the network.</p> <p><i>See Section 2.13 in 2016 Report: Sustrans data showing additional 376km added to NCN between Dec 2013 and Dec 2014.</i></p>
<p>6. Develop better integration with public transport, through partnership working with interests such as rail and bus/coach operators and RTPs.</p>	<p>This was an area regarded by the majority as offering the best prospect of a future modal shift, with the Abellio ScotRail franchise cited as a potentially promising development. There had been positive changes in cycle parking and rental facilities at railway stations/transport hubs, with introduction of signage to onward cycle links. Bus-cycle integration was also considered important, but the consensus was that more collaborative work needed to be done between the public sector and bus operators. There were particular infrastructural issues with regard to cycle-bus integration e.g. the development of segregated cycle ways in urban areas had raised design issues around bus lanes and bus stops. More guidance was called for in this respect.</p> <p>With regard to bike carriage, the news was more mixed. On the positive side, Edinburgh Trams were praised for their policy on bike carriage during off-peak times. On a negative note, there was concern about the planned reduction in bookable bike spaces on the West Highland Lines in particular. Concerns were expressed regarding bike carriage conditions on the Edinburgh-Glasgow main line, despite the increase in the number of coaches per train.</p>
<p>7. Establish the Cycle Hub at Stirling Station as a pilot and evaluate it pilot for potential wider roll-out at other railway stations.</p>	<p>Responses came from those who had knowledge of the pilot initiative with most reporting that they were unaware of any published reports about its operation or impact. The general view of those who did respond was that this action had been successfully delivered and that the model could be replicated at other rail stations across Scotland. One response noted that the Stirling model took a holistic approach in its work with schools, clubs, events and active travel i.e. it was a cycling initiative which just happened to be at a railway station. A concern was raised that the concept had subsequently been 'reduced' to bike hire and bike parking (e.g. at Haymarket); and some felt that the idea should embrace active travel,</p>

	<p>rather than cycling exclusively.</p> <p><i>See 2.14 in 2016 Annual Cycling Monitoring Report.</i></p>
<p>8. Promote the implementation of 20 mph schemes in all residential areas and share best practice across the country.</p>	<p>The introduction of the 20 mph speed limit into national policy and guidance was universally welcomed. In terms of implementation, Edinburgh CC and Clackmannanshire were clearly leading the way, and there were indications that schemes were starting to happen in other LAs such as Glasgow and Shetland, or at least becoming part of their aspirations (Stirling). However, the general view was that the 20 mph speed limit should be the norm in <u>all</u> residential areas. A critical impact factor was the manner in which it was deployed and the scale of its operation i.e. within small disconnected areas or more extensive zones within residential areas. Some responses called for practical support and detailed guidance around implementation at a national level (e.g. orders, communication, signage, enforcement). It was felt that this would promote a degree of standardisation across the country. The greatest source of uncertainty concerned funding, specifically around fears about the discontinuation of CWSS funding which had been instrumental in progress to date.</p>
<p>9. Develop and deliver a ‘Mutual Respect’ Campaign for all road users (complementing the ‘Give Me Cycle Space’ campaign aimed at drivers).</p>	<p>Some were aware of the launch of Mutual Respect and the Advertising Standards Authority ruling (subsequently repealed): the campaign attracted controversy at the time, and proved divisive within the cycling community. There was agreement that the underlying problem of a ‘them and us’ culture remained. The ‘Give Everyone Cycle Space’ campaign was more positively received, however many respondents concluded that advertising in isolation could not hope to change culture and that any campaign needed to be part of a multi-faceted programme and supported by other safety measures such as 20 mph speed limits and routine enforcement.</p>
<p>Promotion and Behaviour Change</p>	
<p>10. Continue the roll-out of Bikeability Scotland cycle training through schools, steadily expanding participation, particularly in on-road training (Bikeability level 2). Develop and promote support for this, including volunteer-led delivery and parental involvement.</p>	<p>Significant progress, attributed to a number of factors, including the refinement of the CTA delivery model and CT Support Plus; the introduction of a QA system; and CPD accreditation. The potential to embed cycle training into the Curriculum for Excellence and beyond the school setting had several mentions. The main barriers to further progress were perceived to be the recruitment of parent volunteers and funding. More broadly, many felt that the ultimate constraint was the cycling infrastructure beyond the school gates which served to deter independent cycling post-training.</p>
<p>11. Develop Adult Cycle Training resources, building on Bikeability Scotland standards, including an</p>	<p>Less progress. Although the development of the Essential Skills app had been positively received, this was regarded as no substitute for practical training. Main barriers perceived to be low provision of training; low trainer capacity; and low</p>

essential skills module as a pilot for potential roll-out nationwide.	awareness and/or interest among adults who didn't cycle. The particular challenge here was that cycle training was found to be more labour intensive for adults than for children because the former was dealing with different skill levels in different settings. Anecdotal evidence indicated encouraging experiences from adults who had completed training, suggesting a need to expand and promote this support for novice or non-confident people on bikes. Again, the general view was expressed that the current infrastructure was a major barrier for independent cycling post-training.
12. Promote and support community-led cycling initiatives , through signposting resources and providing support for projects that will promote cycling participation in an inclusive, accessible way. Evaluate the delivery of the Cycle Friendly Communities Fund programme to date and promote the learning to further develop approaches to supporting communities.	There were very good individual initiatives funded by the Cycle Friendly Community Fund which tended to be highly localised by their very nature. A call was made for a knowledge exchange event so that community-led groups could share their learning more widely, increase wider visibility and monitoring practices. Several examples highlighted the overlapping and potential reinforcement of community-led initiatives with the most recent Smarter Choices Smarter Places wave of funding for local initiatives (channelled through LAs) and the Cycling Hub concept (in its most holistic sense).
13. Continue to promote projects which encourage primary school pupils to continue cycling when progressing to secondary schools , such as I-Bike and delivery of Bikeability Scotland level 3.	Regarded as critical. This phase, when many pupils have to travel further distances to get to school, represented an opportunity for positive behaviour change but also a risk that much of the good work achieved at primary school might so easily become undone. The increased number of I Bike officers was highlighted as a positive. The responses suggested that Bikeability Level 3 had not yet achieved delivery to any significant extent at a national scale. The problems experienced were not dissimilar to adult training insofar as it attracted lower levels of interest and was massively more labour intensive to deliver. There was a view among some stakeholders that there was an opportunity to promote cycling in a wider context beyond simply active travel to recreation and enjoyment e.g. after-school clubs, led rides and events. Barriers included: funding (costs are high in terms of the number of pupils it reaches); capacity (parents less involved with secondary schools); inadequate lockers and bike storage on campus; and motivational issues. Regarding the latter, several indicated a need for further investigation to understand motivations and drivers for behaviour change within this age group, especially teenage girls.
14. Promote cycling for young people more broadly, for leisure or travel, for fun, health and sport, through the promotion of cycling activities,	Area seen as having huge potential but needing more focused attention. Responses suggested initiatives took place mainly in secondary schools and included led rides during Bike Week, timed around the Give Everyone Cycle Space campaign; roadshow events; and mountain biking projects. At community level, local cycling clubs reported increases in

events and led cycle rides.	youth membership. Responses from stakeholders working in Higher Education indicated a burgeoning interest in promoting cycling among staff and pupils.
15. Develop approaches to promoting access to bikes – e.g., develop Bike Library schemes for schools and communities to promote access to bikes in areas of low cycle use or deprivation, as taster cycling sessions.	Evidence of some progress, with reports of some schools and workplaces having their own fleet of bikes; universities recycling or providing free bike rentals; and some communities providing bike lending libraries or managing second-hand bike sales. However, access was by no means universal, including in rural areas, and concerns were raised by respondents that current initiatives e.g. those enabled by Active Travel Hub funding in city centres or interchange points, would not necessarily be targeting areas of deprivation or low bike ownership.
16. Encourage all employers across all sectors to become Cycle Friendly (e.g., by offering support for workplace cycling facilities and promotional resources, active travel champions, travel planning).	Increase recorded in the number of Cycle Friendly Employer Awards. Several stakeholders talked about its reach and the need for continued impact on modal shift and recommended a concerted drive towards greater hands-on involvement with employers. As with several other action points, the need for such programmes and SCSP to work effectively together was evident.
17. Develop follow-up work from the Smarter Choices, Smarter Places evaluation report, applying learning to encourage active travel as part of community-based sustainable transport promotion.	Limited timescales for bid development and partnership working meant that plans were likely to be pragmatic rather than strategic. Similarly, expectations of behaviour change within narrow time frames would not be realistic. The experience of some LA respondents in this consultation suggested that it was increasingly difficult and time-consuming to find match-funding for these projects.
Monitoring and Reporting	
18. Report annually on an appropriate suite of national indicators to inform the national picture of cycling participation.	This action was subject to different interpretations. A few respondents understood the action point to entail the selection of (brand new) indicators (not delivered); while others understood it as the delivery of a series of monitoring reports from Cycling Scotland (delivered). Regarding the latter, the Annual Monitoring Report, now in its Third Edition, had been generally well received, however there are reservations about the small Scottish Household Survey sample sizes for LA areas. Similarly, the 2012 Progress Report had also been welcomed, with some stakeholders requesting that this be continued on a more frequent basis. There is an appetite for developing a suite of additional, more nuanced milestone indicators in the next version of CAPS.
19. Develop local monitoring , using data from local cycle counts and surveys etc., with support from	Progress here has been more sporadic than steady, with uneven development across Scotland (LAs at different stages and working within different contexts e.g. rurality). The view from several LAs was that using standardised methodology

national delivery bodies to develop a coordinated approach to data collection.	and software across the country would enable data aggregation at a national level, therewith addressing the problem of small sample sizes for local areas in routine national surveys such as the SHS.
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Table 1 Progress against CAPS Actions

3.2 Case Studies

The short case studies below all help demonstrate where positive progress is being made to get more people cycling more often in more places. They also demonstrate that if co-ordinated and well-funded measures are delivered, more people will cycle, illustrating that ambitious objectives can be achieved if resourced sufficiently.

Edinburgh Budget Allocations for Cycling

From 2012, City of Edinburgh Council has progressively increased its budget commitment to cycling, with cross-party support, with 5%, 6%, 7%, 8% and, in 2016/17, 9% of its total Roads and Transport budget invested in measures aimed at achieving the ambitious cycling targets in its Active Travel Action Plan (10% of all trips and 15% of journeys to work by bike by 2020). Cycling is estimated by the Council to have increased 50% with cycling to work at over 7%.

South West Cycle Way – Glasgow

The 2km South-West City Way is an investment of £1.25 million from Glasgow City Council, Sustrans and SPT in dedicated cycling infrastructure and allows people to travel by bike between the city centre and Pollokshields in just 12 minutes. The new route forms part of a wider cycling network by linking into the NCN 75 and is part of the long term ambition for Glasgow.

The route features a two-way cycling system for the majority of the route, segregated from traffic by concrete islands. There are also dedicated cycling phases at most junctions and a diagonal cycle crossing at the traffic signals on West St/Kingston St, thought to be a first in Scotland. Also new are the installation of footrests/handholds next to stop lines. The layout includes floating bus stops, where people cycle past the rear of the shelter.

Cordon counts for Glasgow City Centre generally estimated an increase in the number of cycling journeys in and out the city centre from 3,012 to 9,255 per day – a rise of over 200% – since 2007

Edinburgh 20mph

The introduction of 20mph speed limits across all residential, city centre and key town centre streets in Edinburgh will begin in July 2016. Phase one of the £2.2m project covers much of the city centre, from Queen Street to the Meadows. The area-wide limit, which will eventually cover 80% of the capital's roads, was approved by councillors in 2015, following extensive piloting. The roll out will be complete by 2018.

Levels of cycling to work are highest in the wards where the area-wide pilot commenced, with Meadows/Morningside and Southside/Newington well over 9%.

Clackmannanshire Cycle Friendly Roads

Clackmannanshire Council created a network of rural cycle friendly roads to make them safer and more attractive to people walking, cycling or riding horses. Actions have included providing a pedestrian and cycle link to the new Clackmannanshire Bridge and the reduction of speed limits from 60mph to 30mph, gateway signs and speed limit repeater signs incorporating cycle route and/or cycle friendly road signs on the routes. The cycle friendly roads have seen an average reduction in crash rates of 75%, a reported reduction in vehicle numbers and a measured reduction in vehicle speeds. Having proven popular with residents, users and elected members, Clackmannanshire Council have now introduced a similar scheme for urban areas with Quiet Streets being sign posted. The Quiet Street network is used to link the urban areas with the CFR and NCN networks.

Bikeability Scotland in East Renfrewshire

In 2014 all 23 Primary Schools in East Renfrewshire delivered on-road training the first local authority in Scotland to achieve 100% participation (now followed by Shetland with other authorities close to 100%). Gaining senior level support in schools as well as using local partnerships has created a delivery model which is sustainable and should ensure the on-going delivery of on-road training for years to come. Training standards – and pupil results – have improved markedly thanks to training and support programmes tailored to meet schools' needs. Measures have been put in place to ensure the delivery model is sustainable and can be recreated in other local authority areas.

HI-TRANS Active Travel Audits

HITRANS audited barriers to Active Travel within 17 regional centres in the Highlands and Islands. Each town masterplan now includes a prioritised action plan identifying areas and potential interventions where there is the greatest modal shift potential or where there is greatest need for walking or cycling. The master plans have been used by HITRANS and local authorities to apply for external funding and also help ensure new developments provide suitable facilities for active travel. One such example is the East Inverness Active Travel Corridor, identified as the number one priority in the local Action Plan. This helped secure a new pedestrian bridge over the A9 and also improvements to the link between the new university campus and the city centre. The cycle counter installed on the route has recorded growth of 27% growth in the first year between 2015 and 2016.

Neilston Development Trust (NDT)

The Neilston Cycle Hub/Cafe has become the focal point for cycling activities in Neilston and surrounding areas. Services include bike maintenance and repair, fixed pump and repair station, bike sales and regular cycling events, such as family ride outs. In addition, NDT is also a Cycle Friendly Employer Service Centre and can help employers take forward their interest in achieving this accreditation. In 2015 Neilston became Scotland's first Cycle Friendly Community due to the raft of measures that have been introduced to promote cycling by the Council and community and provide sustainable and inclusive cycling services, activities and events within the village and its surrounding area.

National Cycle Network: Caledonia Way Cycle Route

The upgraded and newly opened Caledonia Way (Route 78 of the NCN) stretches 228 miles from Campbeltown to Fort William and on to Inverness. It offers a variety of cycling, from

challenging on-road hills to lengthy sections of traffic-free path to routes for children to cycle or walk to school through the spectacular scenery of the west coast of Scotland. An estimated 340,000 trips per year, 80% walking, 20% cycling with an estimated economic contribution of £361,330 to the local economy.

This is part of the approximately 2,371 miles (3,815 km) of National Cycle Network routes in Scotland, including 644 miles of traffic-free routes which has seen a huge increase in the number of people cycling (or walking): in 2013 there were an estimated 104 million trips on the NCN and in 2014 there were an estimated 121 million- 63 million by bike.

Campuses across Scotland

There is evidence of a significant and increasing number of students cycling everyday journeys:

- Dundee University Travel Surveys indicated the proportion of students cycling increased from 5% to 7% between 2008 and 2011.
- Edinburgh University's 2013 travel survey indicated around 11% of students used a bicycle for the main mode of transport.
- The 2014 travel survey at Heriot-Watt's Riccarton campus suggested a 6% cycling rate.
- Glasgow Caledonian University has recorded a 20% increase in cycling since 2014.



4. Renewing CAPS

4.1 Likelihood of Achieving the 10% Vision

Cycling levels are going up in Scotland: the 46% increase in the distance travelled by bike since 2004 demonstrates that. The latest annual cycling monitoring report also indicate that over 6% of people cycle usually or regularly to work; locally, the proportion of people cycling to work regularly is over 5% in 14 out of 32 LAs, with the five highest levels to be found in Edinburgh City, Argyll & Bute, Highland and Dumfries & Galloway. Again locally, census data show that nearly 10% of people cycle to work in two wards in Edinburgh.

A variety of measures demonstrate there is significant progress being made but it is important to reiterate that modal share remains the best method of assessing success in getting more people cycling. The national data suggest that the vision of a national 10% modal share will not be achieved by 2020: while the modal share of 1.4% in 2014 is up from 1% the previous year, there is no indication of the necessary trend in national cycling levels, as measured by the Scottish Household Survey.¹ In the recent consultation, a sizeable minority of stakeholders claimed that the vision would not be met, with nearly all of them referring to the considerable distance still to be travelled. The level of modal shift remains theoretically possible, but requires a significant shift in resources and behaviour, and a speed of modal shift not in evidence in any other country to date, at least when measured at a national level.

CAPS therefore finds itself at a critical juncture, with a choice to be made. It can choose to follow the same path as before at the same level of commitment. This is likely to deliver incremental gains in modal share over time- this would be positive progress but it will undoubtedly fall short of the 10% national vision. Alternatively, it can choose to renew its commitment to the shared 2020 vision with a significant - and immediate - change of gear. The evidence is clear that this will deliver faster results in specific settings and cities, for example journeys to work in summer or in Edinburgh where cycling is already past the ‘tipping point’.

Most critically, it requires that we look afresh at the ‘bigger picture’. The focus since the publication of CAPS in 2010 has been on defining a set of priority actions. These have evolved in line with the stage of policy development. While this approach has been useful in the past, the disadvantage is that it focuses attention on the delivery of disparate and specific individual actions. For example, there are no CAPS 2013 actions relating to resources yet the evidence is clear that long-term funding is the most fundamental issue when it comes to increasing cycling. At the same time, we risk not seeing the interconnectedness between the CAPS actions. For example, while much has been achieved in training schoolchildren to cycle, progress towards independent cycling appears to be hampered by a physical infrastructure which does not feel safe to the majority of people for them or their children to cycle. In short, there needs to be a joined up approach with actions at all levels of Government and delivery bodies flowing from clear overall objectives and a costed action plan.

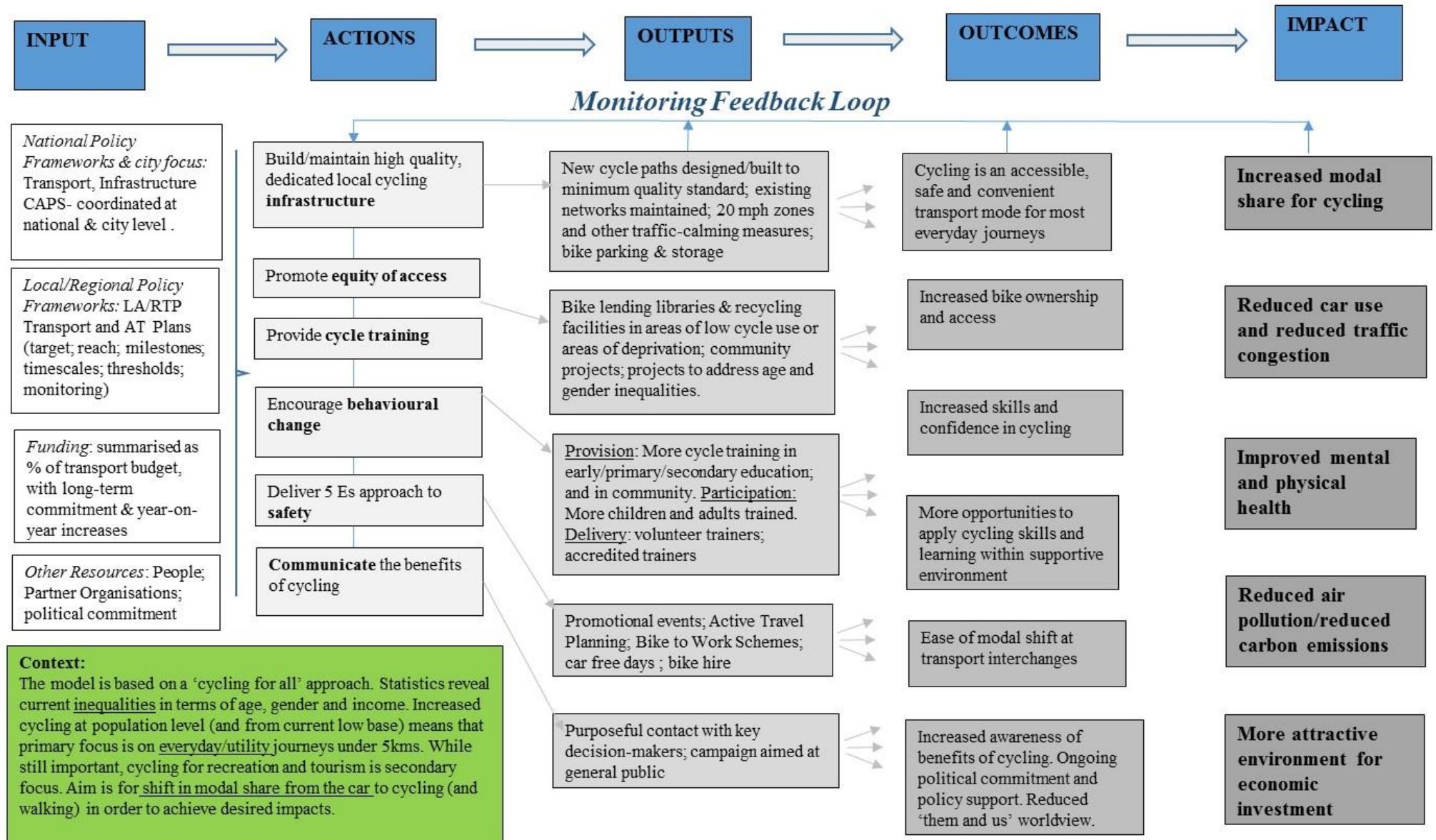
¹ The Scottish Household Survey is imperfect in measuring cycling mode share but the best indicator currently available at a national level on everyday journeys. See full study at: <http://www.cyclingscotland.org/wp-content/uploads/2015/03/20130110-Monitoring-Cycle-Use-Report-FINAL-January-2013.pdf> for further explanation.

4.2 Achieving Success: the CAPS Logic Model

Figure 1 is a proposed logic model for CAPS. It was developed for the purpose of this report for several reasons. First, it helps maintain a balanced focus on the whole of CAPS as well as its constituent parts simultaneously. Secondly, it helps inform future priority and actions. It does this by making explicit: where the primary focus for CAPS should lie; what the prerequisites should be; what a comprehensive and coherent programme of activities might include; and finally how these combine to bring about the desired change. Thirdly, the logic model highlights how each output delivers multiple outcomes. Lastly, it highlights the critical importance of monitoring to measure progress and refine inputs wherever required.

Figure 1 CAPS Logic Model

Mapping the CAPS 'Logic'



The following sections provide more detail on the various elements within the CAPS Logic Model. (Text is shown in bold to highlight the logical areas of focus for CAPS 2016).

Focus of CAPS

- Routine statistics show that people cycling are more likely to be male, white, middle class & aged 35-44 years. More attention should therefore be given to achieving greater equality, in terms of promoting cycling as an **activity for anyone**, irrespective of age, gender or income.
- The aim is for increased cycling at a population level. This calls for a primary focus where evidence demonstrates that the greatest modal shifts will be achieved. The European Comparator supports a CAPS **focus on short journeys**. According to the report, this is where cycling is ‘most competitive with motorised modes in terms of journey times, and which most people tend to consider achievable on bike with no more than a modest amount of physical effort and with no need to change clothes’ (p.75). This does not mean to say that other types of cycling (leisure, recreation, sport, and tourism) should not be considered within the scope of CAPS. On the contrary, a people-centred approach should enable greater attention to be given to encouraging ease of movement between different cycling types at different life stages and in different settings with an overall focus on modal shift.
- **Modal shift from car**. Priority should be given to reducing car modal share at the same time as increasing both walking and cycling modal share. This avoids the situation where people might be encouraged to simply switch from walking to cycling, from one active mode to another, a scenario which risks undermining the health and environmental benefits on the right-hand side of the logic model. Evidence from the European comparator work and from cities such as York, Oxford and Cambridge demonstrates that to achieve this it is necessary to make car trips relatively slower and less convenient than cycling, walking and public transport trips.

5. CAPS 2016: Pre-requisites for Success

A successful rapid modal shift to cycling is conditional on the following six pre-requisites being met:

- The CAPS national policy framework continues to be an essential pre-requisite to increasing cycling participation in Scotland. The next action for CAPS therefore is to undertake a refresh, incorporating cycling-related best practice and developments in the UK and Scotland, referencing relevant policies (e.g. National Walking Strategy; a Vision for Active Travel in Scotland; Active Scotland Outcomes Framework; National Transport Strategy and Infrastructure Investment Plans). The suggestion is for complementing walking and public transport initiatives and greater cross-portfolio work in other policy areas such as planning, education, health, and the environment. As part of this, **a vision for a 10% modal share of everyday journeys should remain, with an increased commitment to achieving modal shift by local, as well as national, government, including a clear aspiration for reduction in car use, especially for short journeys.**
- **A long-term increase in sustained funding is required**, with year-on-year increases over time towards a 10% allocation of the transport budget to active travel by both national and local government.² Edinburgh is the clear exemplar in this respect (see case study). Given that the budget for 2016/17 has already been determined, it is assumed that this process will take at least two more rounds of Scottish Government three-year spending reviews at national level, helping achieve a progressive step-change in investment in cycling and active travel. Without a change to longer term budget commitments to cycling, the 10% shared vision will not be achieved within any foreseeable timescale. As a direct comparison, the Scottish Government Infrastructure Investment Plan states a commitment to complete dual carriageways between Dunblane and Inverness by 2025 and Aberdeen and Inverness by 2030. **This long term horizon is also necessary to deliver the change needed to achieve a 10% cycling vision.**
- **Delivery of the national 10% modal share should be supported by coordinated local cycling strategies and delivery plans at local authority and regional level with specific, ambitious and measurable modal share objectives.** The lesson for Scotland from other European countries is that cycling objectives must be set at a local level and both national and, crucially, local funding and planning decisions geared to help achieve them, with co-ordination overseen at a national level. Objectives will inevitably vary according to local circumstances, including existing baseline levels of cycling. Regional Transport Partnerships and NGO delivery bodies are placed to promote sharing of knowledge and experience across local boundaries (see case study). This is especially relevant to local monitoring.

² As the Comparator Study (in Appendix 1) states, some active travel investment can be hard to define and disaggregate. However, definition helps define budget spend which encourages cycling (or walking journeys, as opposed to investment which encourages and enables more journeys by car or other transport modes.

- Cities will be the driver of significant modal shift **and the national vision should be directly co-ordinated with a focus on cities and the largest urban areas achieving at least 10% modal share.** The focus on cities is for multiple reasons:
 - Cities often act as journey-to-work catchments and functional areas for public service delivery to enable coordinated programmes;
 - there are more short journeys with more goods and services available within an easy-to-cycle distance;
 - achieving modal shift in large urban areas will have the greatest impact on congestion and air pollution;
 - this would be a shared commitment between national government and the councils who govern the seven cities and largest urban areas, with specific actions designed to achieve the 10% shared vision, as is emerging from the Community Links Process. This commitment would remain in place regardless of any future changes in transport governance or funding frameworks ³ or local government restructuring.
 - it is clear from Europe that achieving success in larger cities will drive a higher national mode share (Copenhagen in Denmark, Amsterdam and Groningen in Netherlands) and can help inspire developments in smaller towns and rural areas.
 - It is also clear that cities can achieve a significantly higher mode share than can be delivered at a national level (for example Edinburgh in Scotland, London in England, Seville or Vittoria-Gasteiz in Spain)
 - A 10% national mode share is unachievable without a mode share of at least 10% in the biggest cities.
- The primary investment focus for national and local budgets should be on enabling cycling through **changing the physical environment for short journeys to make it easier for anyone to cycle.**
- The stakeholder consultation made frequent mentions of the need for human as well as financial resources. There is a need to **build and maintain staff numbers and capacity to design, build and maintain high quality cycling infrastructure and manage the local roads network, helping make it fit for cycling.** Political commitment from Local Authority officials and elected members is critical in helping to provide these resources and support delivery efforts, even in the face of hostile public debate.

³ The stakeholder consultation produced a variety of views on match, challenge and grant funding approaches without any consensus emerging. There was also no consensus about the role of the concordat between national and local government and responsibility for setting priorities at local or community levels.

6. CAPS 2016 Priority Activities

The following six areas are where financial and human resources should be prioritised: 1) infrastructure; 2) training; 3) equity of access; 4) behavioural change; 5) Safety and 6) communication & advocacy. They are inter-connected and therefore should be regarded as essential components of a comprehensive and coherent intervention for cycling.

- **Build and maintain dedicated cycling infrastructure, enabling people aged 8-80 to cycle on coherent cycle networks in cities and towns.** This entails cohesive, comprehensive and seamless networks of on-road segregated paths in cities and, where appropriate, alongside trunk roads and busier local roads in rural areas. In the urban setting such networks will link into and incorporate existing off-road networks where they deliver direct and high quality routes. ‘Success’ should not only be measured in terms of additional kilometres of network but have a qualitative aspect, including following good practice design standards, numbers of segregated cycle lanes, and integration with public transport. Perceptions of safety and protection of non-motorised users- both of which must be tackled- will be enhanced by the introduction of measures such as 20 mph speed limits in urban settings.
- **Extend the reach of cycle training so that every school-aged child has the opportunity to learn to ride a bike safely and confidently.** Cycle training has been in place in countries such as the Netherlands and Denmark for many years. However, the European Comparator report reminds us that, although an important part of any cycling intervention, it is ‘not a substitute for physical measures to make cycling both be and seem safer’ (p.74). East Renfrewshire and also Shetland (see case study) are the exemplars in providing Bikeability training in all of their primary schools. More development work, including research, is needed in secondary schools.
- **Prioritise programmes to ensure equity of access to bikes and cycling opportunities, regardless of age, gender and income.** Scotland lags behind other exemplar countries in terms of access to bikes. This is more than simply an indication that Scotland lacks a cycling culture in Scotland. It is also a source of inequality – in Glasgow City for example, only 22.1% of the population have access to a bike.
- **Ensure new infrastructure is supported by promotional programmes to encourage people to change behaviour.** These can take a number of forms depending on the particular context and setting, for example: car-free days; mass participation events; individualised active travel planning; workplace bike schemes; Bike Week.
- **Make cycling safer for all.** The safety record for people cycling in Scotland and the UK is worse than a number of other European countries and serious injuries have risen significantly (see Appendix 2). There must be a focus from Government, Police Scotland and others to deliver the 5 Es of Education, Enforcement, Encouragement, Engineering and Evaluation to improve safety for people cycling.

- **Develop a long term communication plan that represents cycling as something that anyone can do, not simply a minority and is a transport mode that brings many benefits to Scotland: a healthier, less polluting nation, enjoying better public space, improved air quality and less congested streets.** A continuous and consistent campaign would aim to win ‘the hearts and minds’ of the public about the benefits of cycling. Rather than about behaviour, or indeed about the environment, the main message for this campaign should be about improved quality of life for people. The economic benefits for rural and suburban areas should not be overlooked. Cycling for leisure, recreation and sport can be essential gateway activities to enable more people to try and enjoy everyday utility cycling and the economic benefits of leisure and tourism-related cycling, especially in remote areas, should not be overlooked. Programmes should reinforce different forms of cycling to maximise inclusiveness while never losing sight of the over-riding need for modal shift.



7. Appendices

Appendix 1: International Comparator Study Extract: Introduction; Common trends; Lessons for Scotland

Appendix 2: Infographic: A Snapshot of Cycling in Scotland, 2016

Appendix 3: Links to other Useful Evidence

Appendix 4: List of Stakeholder Consultation Respondents

Appendix 1: Urban Movement, ECF & Cycling Scotland: International Comparator Study, 2015. Extract: Introduction and Concluding Chapters: Common trends; Lessons for Scotland.

00 INTRODUCTION

Cycling Scotland is committed to encouraging and enabling more people to cycle more often, to help realise the vision of the Cycling Action Plan for Scotland (CAPS) that, by 2020, 10% of everyday journeys in Scotland will be bike. In pursuit of this vision, Scotland seeks to follow the examples of other European countries that have achieved significant cycling mode share over time.

In keeping with Cycling Scotland's commitment to an evidence-based approach to growing cycling, this study was tasked with identifying and then disseminating the evidence from other countries concerning the implementation of initiatives that helped achieve growth in cycling. The headline aim of the study was:

“to identify the progress over time that key European comparator countries made to increase their cycling mode share, the implementation of key plans, policies and programmes which contributed and to help identify precedents that will help achieve the 10% vision for Scotland.”

Evidence from a total of five countries was to be obtained, with two of these required to be the Netherlands and Denmark. The other three would be drawn from Sweden, Norway, Belgium, Germany, France, Switzerland, Austria, Spain and possibly a non-European example, if one was considered appropriate.

An initial, high level review of available data and the relevance of countries and cities to Scotland, established which three other countries would be most suitable for the purposes of this study. As agreed with Cycling Scotland, the list of study countries is:

• Netherlands • Denmark • Germany • Spain • Austria

In summary, the purpose of this study was to learn lessons about cause-effect relationships, in terms of cycling trends, that will help guide future policy and action in Scotland. Put more simply, the research is intended to let the evidence and data speak for itself in revealing an understanding of:

(a) what has changed, and (b) what could have caused this change.

The study brief contained two lists of the types of evidence that should be sought: evidence of change over time; and

identification of national/local policies and programmes during the period in question.

Effects - evidence of change

a. Data on cycling mode share and usage (at a national level and for key cities/regions; and, if possible, for different journey purposes). **b.** Bike ownership levels (by country/city). **c.** Data on the age and gender of people cycling. **d.** Data on exposure to injury while cycling (the number of injuries per unit distance cycled, by severity of injury, where possible).

Causes - evidence of policy/action

a. Pro-cycling policies backed by budget allocation/funding programmes (at national level and for key cities/regions). **b.** Provision of cycling infrastructure (including cycle tracks and traffic management measures). **c.** Provision of cycle training. **d.** Programmes and events intended to support cycling to schools and workplaces, and to promote cycling to the general public.

Although our work is the most comprehensive of its kind that we have seen, it makes no claim to being exhaustive. Limits on the resources available for the study make it inevitable that we will have failed to find some data that might have been useful. Nevertheless, we think it unlikely that further research would significantly alter the key findings and lessons for Cycling Scotland.

‘Effects’ and ‘Causes’, in this order, are used as the titles for chapters 01 and 02 of the report. Although it is conventional to consider causes and then effects, the nature of this study is such that significant effects need to be identified first, in order for it to be worth exploring the potential causes.

Rather than consider each country in isolation, this report is structured to bring together (in chapter 01) the evidence of change that occurred in the five countries at different times over the past 50 years. It then presents (in chapter 02) the evidence of policy and action that occurred across those countries in that time so that reasonable conclusions about the causes of change can be drawn.

Based on the following conclusion from Pucher and Buehler’s ‘City Cycling’ -

“Most policies that increase cycling and make it safer are implemented at the local level. National governments, however, influence cycling through national cycling policies, dedicated funding, traffic regulations, roadway and bikeway design standards, and dissemination of cycling expertise.”

- we anticipated that there would be more to learn at the city (and possibly regional) level. However, we agreed on the importance of also exploring the national level, because it here that some of the ‘big moves’ - which ultimately result in local action - are likely to have started (e.g. in terms of policy and associated funding).

For this reason, we adopted a sequential process for chapters 01 and 02, whereby, for each of the five countries, we explore data at the following levels, in turn:

• Nation • Region • City/Town

The relationship between national initiatives and regional/city action can be investigated further in due course, building on previous work by Transform Scotland and Sustrans Scotland.

<http://transformscotland.org.uk/what-we-do/research/civilising-the-streets/>

Note that the decision was taken to focus examination of Dutch data on the National level only. This was partly because the Netherlands was considered the best country to study at this level; and partly because of the challenges of selecting from a large body of regional/city/town data with the practical constraints of this study.

Following chapters 01 and 02, chapter 03 presents a distillation of common trends across all countries; similar patterns of cause and effect that are observed in different nations, regions and cities.

Finally, chapter 04 seeks to establish the main lessons arising for Scotland.

Overall, we have considered it essential to let the data speak for itself and to avoid being explicit about a direct relationship that cannot be proved. The weight of evidence should be the key determinant of the strength of any given relationship, and we trust that the report is faithful to this approach.

Disclaimer:

Concerning the reliability of the figures and dates quoted in this report, it should be noted that data has often been obtained from foreign language documents (or others' translations of such documents) and there may be errors in translation. Note also that the dates for some figures are not always made specific in their source (e.g. they are written in the sources as relating to the 'present' situation but may in fact come the most recent survey, a year or more previously). Finally, while official documents have been used almost exclusively (i.e. rather than commentary or quotation from other observers), the original source (i.e. survey or political instrument) is rarely obtainable. The figures used in this report are presented in good faith.

03 COMMON TRENDS

From Causes to Effects

Taking account of the large volume and wide range of different types of data presented in the previous two chapters, undertaking a detailed, forensic analysis is not possible in the context of this particular study. It is, any case, arguable if such analysis would be a profitable exercise. Both this study and the International Cycling Infrastructure Best Practice Study that Urban Movement undertook for Transport for London in 2013 show that even the richest datasets for single places cannot establish cause-effect relationships in the form of 'Quantity X of Action A will achieve Quantity Y of Change B'.

There is also the matter that different countries, regions and cities have, for various reasons, done different things to grow cycling having had, amongst other things, different starting points, political priorities and timescales for action.

Therefore, rather than trying to establish patterns for each country, and then attempt a detailed synthesis, this report focuses on identifying the common trends that are supported by most datasets, if not all, whatever the country, region or city.

Taking this approach, a clear cause-effect pattern has emerged, involving a sequential relationship between the following elements:

- a. Political commitment (leads to)
- b. Funding for cycling (leads to)

- c. Provision of better infrastructure (leads to)
- d. Increase in the amount and mode share of cycling.

Causes

In terms of the four causal factors that this study focused on, the following detail can be added.

Cycling policies + funding programmes

The evidence indicates that a pro-cycling policy is an essential pre-condition to seeing change on the ground. However, well-worded policy alone does not deliver the change; it needs to be backed by significant funding, principally in physical measures. Although this may be because this study was tasked with looking specifically at cycling, little evidence emerged of authorities having joint walking and cycling policies.

Provision of cycling infrastructure

Data on infrastructure tends to be limited to measures that it's simple to enumerate; typically lengths of cycle lanes/tracks. Traffic management measures - e.g. filtering permeability, slow speed zones - are rarely mentioned other than in general terms. Although it is not always easy to determine the quality of the measures installed, it is, nevertheless, possible to trace a positive general relationship between the length of cycle lanes/tracks and the amount of cycling.

Provision of cycle training

Education and training is almost always part of the overall approach to growing and maintaining cycling in places where high levels of cycling, or clear growth in cycling over time, is found. No studies were found that established any direct relationship between the amount or quality of cycle training and the cycling mode share.

Programmes + events

Significant cycling promotional programmes tend to be pursued by cities that are serious about growing cycling, and less by those where cycling levels are already high. The more comprehensive programmes are generally the work of cities that also have strong pro-cycling policies and funding regimes, and they do seem to engage the population at large. No clear relationship between promotional activities, in isolation, and change in people's long-term travel habits can be observed in the available data.

Effects

In terms of the four principal effects that this study focused on, the following detail can be added.

Mode share + distance travelled

The evidence points to a fairly clear relationship between mode share and the quality of conditions for cycling. However, measures of distance cycled (e.g. total km/year or average km/person/year) are less reliable indicators. Some datasets show variance in both mode share and distance cycled over the same time periods, and these tell different stories in terms of increase/no change/decrease. Since distance cycled can obviously rise because the same number of people go further, this measure should be treated with caution when used to assert growth in the popularity of cycling.

Bike ownership

While bike ownership levels are a simple and useful measure of the popularity of cycling, they are secondary to mode share, which is the primary indicator for determining what cycling effects have arisen from the causal factors. The available data indicates that higher bike ownership levels are associated with a higher cycling mode share, but does not enable any clear relationship between ownership levels and any causal factors to be asserted.

Age + gender

The amount and quality of data on age and gender related to cycling is generally poor. What data there is tends to suggest that the proportion of women and both younger and older people in the cycling population is more representative of the population at large where the cycling mode share is highest (i.e. where conditions for cycling are found conducive by more people).

Exposure to injury

The amount and quality of data on exposure to injury for cyclists is generally poor. What data there is generally suggests that exposure is lower in countries where there is more cycling.

However, while such a relationship (even though it may only be tentative) is sometimes used to assert that there is ‘safety in numbers’, it is important to remember that other data more clearly indicate that increases in ‘numbers’ are themselves the result of people finding cycling conditions to be better (including safer). It follows that cycling does not so much become more safe when there are more cyclists as that there are more cyclists when cycling becomes more safe.

Note that, should a reduced level of exposure to injury while cycling nevertheless still be a higher level than that for travel by other modes, this could be used to argue against a policy of growing cycling. Clearly, this is an area where further research would be beneficial, and where the broader health benefits of active travel, as well as cycling’s contribution to other policy goals, should be brought under consideration.

04 LESSONS for SCOTLAND

A clear pro-cycling policy is an essential prerequisite for positive change

This lesson, which is clear from the research, has been underlined by recent and separate piece of work by ECF to explore the relationship between where a nation is ranked on the latest ECF Cycling Barometer and whether or not it has (or has had) an adopted national

cycle policy/ strategy/plan. The headline findings were that all countries with a national cycling policy rank among the better performing countries (except Ireland), and that no country without a current or past national cycling strategy is in the upper half of the Cycling Barometer ranking.

The key measure of practical commitment to a pro-cycling policy is found in the funding support for cycling

A pro-cycling policy must be supported by substantial investment pro-cycling measures, if the objectives are to be achieved; recognising that investment in improving conditions for cycling can often be part of complex budgets, and therefore hard to disaggregate.

As a guide, the ECF has calculated that each 1% increase in cycling mode share requires an average of a €0.8 per person per year. The 2010 figure for the Netherlands was around €25/head, for a 27% mode share; which compares with the current UK figure of around €2.4/head for a 2% mode share.

Provision of better physical conditions for cycling is key to growing levels of cycling substantially

The evidence strongly indicates that, to grow cycling appreciably, the primary investment focus should be on enabling cycling through changing the physical environment (e.g. providing protected cycle tracks and/or managing motor traffic). Measures to encourage cycling (e.g. through training and promotion) should also be part of the package (see below).

Training for school-age children is an important part of the package for growing/ maintaining cycling

If the Netherlands considers it worthwhile to invest in ensuring school age children receive a programme of cycling education and training over many years - and it does - then that is probably lesson enough for Scotland. That the same is also true of Denmark emphasises the point. However, as both these countries and others demonstrate, cycle training - while an important tool in growing cycling - is not a substitute for physical measures to make cycling both be and seem safer.

Mode share is the most reliable indicator of cycling's popularity

A number of measures are used to communicate how the amount of cycling changes over time and to compare success in growing cycling. Measures based on distance travelled must be understood in the context of other factors, like population growth, or the extent to which increases are due to the same people cycling further. Mode share is the most reliable single indicator of whether more people are cycling for more journeys; and therefore of the success of any pro-cycling policy.

(N.B. There are differences in how walking as main-mode is assessed. So, in comparing cycling mode share datasets, it is important to check that walking has been treated consistently.)

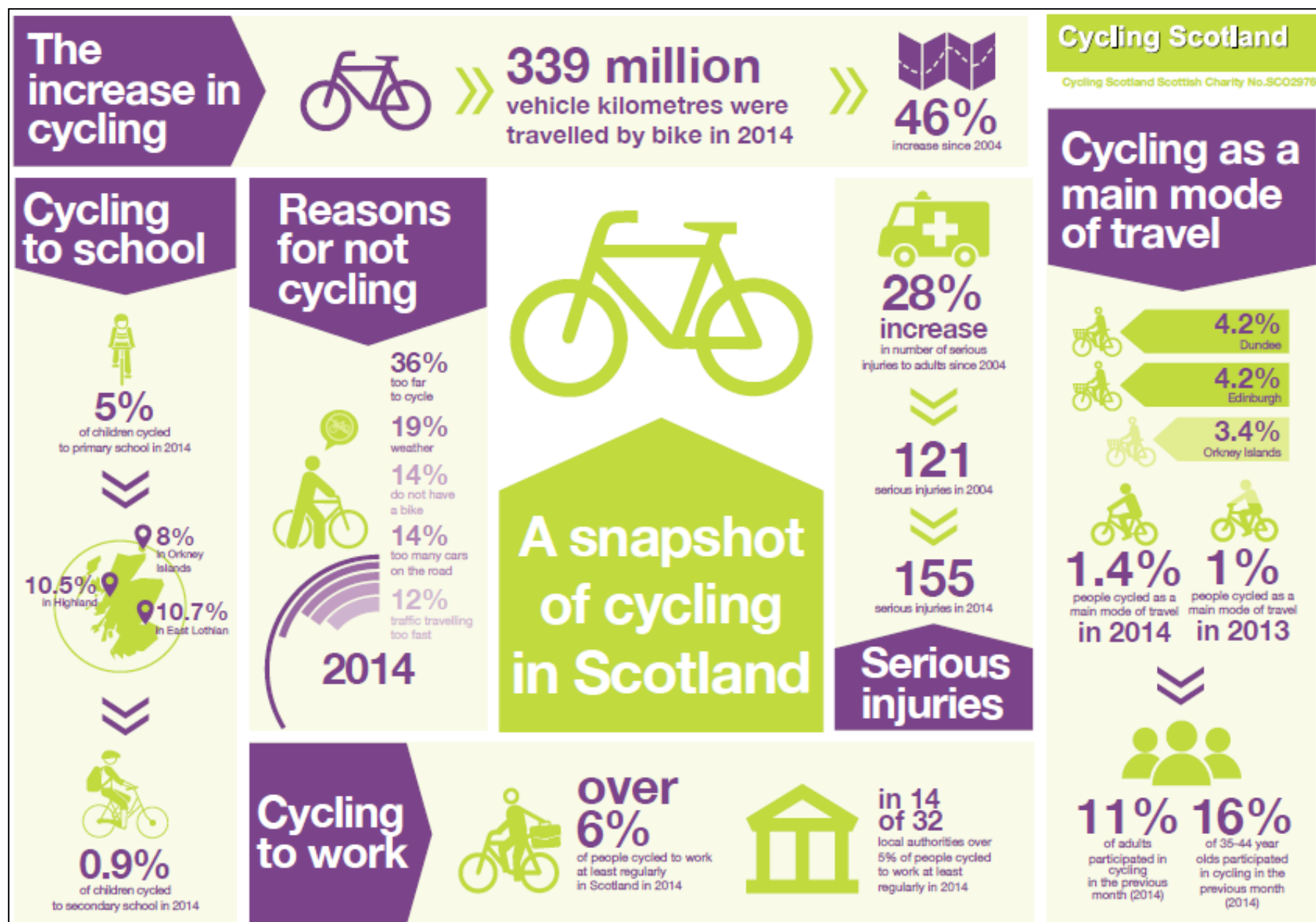
While targets are helpful, these should be set intelligently

In any country, the national mode share for cycling will always be lower than the mode share in the best regions or cities. This in turn suggests that the national aspiration for cycling in Scotland should be lower than that for the best cities; which in turn indicates that cycling target-setting should be reviewed at a local level. Any mode share target should be based on the current mode share; and although ambitious targets can help drive positive change, it is important that these are not set unfeasibly high.

Efforts to grow cycling from a low base will be most effective when targeted on relatively short journeys

It is no surprise to observe that the highest cycling mode share data is found in cities and towns where a very large number and wide range of journey types involve trip lengths of no more than around 5 miles (8 km). These are the distances for which cycling is most competitive with motorised modes in terms of journey times, and which most people tend to consider achievable on bike with no more than a modest amount of physical effort and with no need to change clothes. This is another factor that has implications for how cycling targets should be set and how funding on physical measures should be focused to maximise the return on investment.

Appendix 2: Infographic: A Snapshot of Cycling in Scotland, 2016:



Appendix 3: Links to Further Evidence

- **Annual Cycling Monitoring Report 2016**; Cycling Scotland. Available from: www.cyclingscotland.org/policy/monitoring
- **Local Authority National Assessment 2013**; Cycling Scotland. Available from: <http://www.cyclingscotland.org/policy/national-assessment-of-local-authority-cycling-policy>
- **Sustrans Scotland Walking and Cycling Outcomes**. Available from: www.sustrans.org.uk
- **Hands Up Scotland Survey**; Sustrans. Available from: <http://www.sustrans.org.uk/scotland/what-we-do/schools-and-universities/hands-scotland>
- **Spokes Annual Survey on Local Authority Funding**; Available in Spokes bulletins.
- **A Long Term Vision for Active Travel in Scotland 2030**; Scottish Government. 2014; Available from: http://www.transportscotland.gov.uk/system/files/documents/tsc-basic-pages/Active_Travel_Vision.pdf
- **National Walking Strategy Delivery Plan**: Available from: <http://www.gov.scot/Resource/0045/00452622.pdf>
- **CAPS: Progress Report, September 2012**; Cycling Scotland. Available from: <http://www.cyclingscotland.org/wp-content/uploads/2013/08/CAPS-Progress-Report-2012.pdf>
- **CAPS Public and Stakeholder Survey**; Cycling Scotland, 2009: <http://www.cyclingscotland.org/wp-content/uploads/2013/08/CAPS-Public-and-Stakeholder-Consultation-Facilitation-%E2%80%93-Summary-Report-%E2%80%93-Steer-Davies-Gleave-2008.pdf>
- **Measuring Outcomes: Robust Methods for Monitoring Cycling in Scotland**; Report for Cycling Scotland January 2013; MVA: <http://www.cyclingscotland.org/wp-content/uploads/2015/03/20130110-Monitoring-Cycle-Use-Report-FINAL-January-2013.pdf>

Appendix 4: List of Stakeholder Consultation Respondents

Aberdeen City Council
Chartered Institute of Highways and Transport
Clackmannanshire Council
Coupar Angus Cycling Club
Cycling UK (previously Cyclists' Touring Club, CTC)
Dumfries and Galloway
Dundee City Council
East Dunbartonshire
East Renfrewshire Council
Edinburgh Festival of Cycling
Falkirk Council
Freewheel North
Glasgow Bike Station
Glasgow University
Go Bike
Golden Jubilee Foundation
Hitrans
Highland Council
Living Streets
Moray
Nestrans
NHS Scotland
Paths for All
Pedal on Parliament
Scottish Cycling
Sustrans
South Lanarkshire Council
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