

STRATEGIC TRANSPORT PROJECTS REVIEW

PROTECTING OUR CLIMATE AND IMPROVING LIVES

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Appendix I: Recommendation Appraisal Summary Tables

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1. Detailed Appraisal Summary

An 'Appendix I: Recommendation Appraisal Summary Tables (ASTs) Explanatory Note' accompanies this AST.

1.1. Recommendation 9 – Improving access to bikes

Recommendation Description

The benefits of any investment in new or existing cycle route infrastructure can only be realised by people that have access to a bike. Only 35% of Scottish households have access to a bike (this falls to 18% for households with a net annual income of £10,000-15,000, and 16% for households whose income is below £10,000)ⁱⁱⁱ.

Although the cost of cycle ownership can be fairly low, purchase of a bike and associated accessories is still a significant outlay for many people, particularly for families or those who need more specialist cycles. Furthermore, many households would not have bikes that suit every individual, nor have all appropriate accessories to safely use and store cycles. There is also often a lack of access to training or support that would give people the necessary confidence and skills to cycle.

This recommendation would improve access to bikes through a multi-faceted programme of interventions to enable people to cycle, and to give them confidence and skills to do so, in line with local community needs. By enabling more people to cycle, this recommendation would enhance the benefits of investments being made in active travel infrastructure, either through STPR2 or other programmes.

This recommendation would improve access to bikes and related accessories (locks, helmets and storage) and could be delivered through a combination of national and local initiatives, which could include:

- National roll-out of free cycles for schoolchildren from lower-income households;
- Community bike libraries providing medium to long-term loan of a range of cycles, including e-bikes, cargo bikes and adapted, specialist or accessible cycles;
- Active Travel Hubs, provided in urban areas, close to transport interchanges with a staffed space to deliver services, information and support to improve awareness, confidence and skills to cycle (and to walk and wheel where appropriate) more often; These would be supported by a network of Active Travel Points for information and community outreach work from the main hub;
- A national subsidy scheme to help organisations and lower-income households to purchase cycles, e-bikes, adapted cycles and cargo bikes;
- Delivery of the Scotland Cycle Repair Scheme, to provide free bike repair and maintenance up to the value of £50;
- Expansion of public cycle hire schemes for short-term access to bikes, especially in large urban areas where demand is greatest;
- Funding for high-quality bike storage facilities for tenements/flatted properties; and
- Through <u>social prescribing</u>ⁱⁱⁱ, enabling individuals to access a bike/equipment and complementary support such as training and buddying.

It is envisaged that many of the interventions would be operated through a public / third sector partnership approach, allowing a range of expertise to be drawn on in the delivery





of active travel initiatives in community settings.

1.2. Relevance

Relevant to communities across Scotland

This recommendation would play an important role in making bikes, and hence cycling, available to many more people across Scotland. <u>Interventions already exist in many local communities in Scotland</u>^{iv}; these remain valid but could be expanded or redefined to support more communities and individuals.

Several of the interventions in this recommendation are assumed to be relevant across Scotland, such as free cycles for schoolchildren, national subsidy to purchase cycles, and cycle repair scheme. There are other interventions which would be largely relevant in Scotland's urban areas, such as cycle hire schemes and Active Travel Hubs.

This recommendation would give particular focus to people living in deprived communities, by targeting interventions at lower-income households, many of whom could substantially benefit from the opportunities that cycling provides but are prevented from doing so by the cost of accessing a bike and associated accessories.

The initiatives described above are likely to be relevant across a range of locations and communities; which initiatives are delivered or taken up where would be dependent on local circumstances and needs.

1.3. Estimated Cost

£101 million to £500 million Capital

Estimated costs for each element are:

- National roll-out of free cycles for schoolchildren from lower-income households. Assumed cost of £300 per child to help fund cycles and accessories. First year initial capital investment of between £21million and £30 million assumed. As the scheme is rolled out it is assumed that use would be made of recycled/reconditioned bikes, and capital investment in new bikes would be needed every 3 years, and that this would be around half the cost of the initial outlay, so over the STPR2 investment period, a total of approximately £90 million to £130 million;
- Community bike libraries introduced across Scotland; with potential implementation in 100 additional locations and an estimated capital cost of between £25,000 and £50,000 per location, giving a total capital cost estimate of between £2.5 million and £5 million;
- Active Travel Hubs, provided in cities and larger urban areas across Scotland, and network of associated smaller Active Travel Points. It is assumed that Hubs are established in 20 locations (in cities/larger towns), and that each Hub manages four smaller Active Travel Points (in satellite locations). Capital set up costs: Active Travel Hubs – £100,000 each and assumed in 20 locations; Active Travel Points – £10,000 each and assumed in 100 locations; total of £3 million;
- A national cycle subsidy scheme, available to organisations and lower-income households to purchase cycles, e-bikes, adapted cycles and cargo bikes. It is assumed subsidy of £300 per recipient would be provided to help fund cycles and accessories. This scheme is assumed to be revenue funded and therefore costs are not included





within the total capital cost;

- Cycle Repair Scheme, to provide bike repair and maintenance up to the value of £50 per recipient. This scheme is assumed to be revenue funded and therefore costs are not included within the total capital cost;
- Expansion of scope and access to short-term public cycle hire schemes. It is assumed that schemes would be introduced or expanded in urban areas with a population greater than 50,000 (of which there are 11 locations in Scotland) and for hire stations to be located in areas where the population density is greater than 4,000 people per square km, which is assumed to be a reasonable threshold^v. Assuming installation costs of £16,000 for an 8-bike station, and 10-16 stations per square kilometre in operating areas, this would equate to between approximately 1,600 and 2,600 stations installed, at an indicative capital cost estimate of between £25 million and £42 million;
- Bike storage for tenements/flatted properties would be relevant to all settlements that have areas of high population density (where there is a high proportion of apartments/flats/terraced housing). It is assumed that the installation of each storage unit would cost £5,000, and at least 3,000 units would be installed, at an indicative capital cost of £15 million. It is assumed that bike storage units of similar specification would also be installed in a range of other community locations, to at least the same cost of £15 million, giving a total capital cost of £30 million. Some revenue costs would also be incurred if stores are to be maintained to a high standard; and
- Social prescribing would be delivered through existing healthcare pathways, with individuals referred to community bike libraries, therefore capital costs would be included within the estimate for those, given above.

If all of the above interventions were to be delivered, then capital costs of this recommendation are estimated to be in the range of £150 million - £210 million. Delivery of most of the measures within this recommendation would be dependent on revenue funding. Revenue costs would also be expected to maintain the high quality of infrastructure and other equipment.

1.4. Position in Sustainable Investment Hierarchy

Reduces the need to travel unsustainably

This recommendation would contribute to 10 of the 12 NTS2 outcomes, as follows:

- Provide fair access to services we need;
- Be easy to use for all;
- Be affordable for all;
- Be reliable, efficient and high quality;
- Help deliver our net-zero target;
- Promote greener, cleaner choices;
- Be safe and secure for all;
- Get people and goods to where they need to get to;
- Enable us to make healthy travel choices; and
- Help make our communities great places to live.



1.5. Summary Rationale

Summary of Appraisal

		ТРО				STAG				SIA						
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Lo	w Scenario	+	+	++	+	+	+	+	++	+	++	+	++	+	++	++
Hig	gh Scenario	+	+	++	+	+	+	+	++	+	++	+	++	+	++	++

This recommendation makes a positive contribution to all STPR2 Transport Planning Objectives (TPOs), STAG criteria, and Statutory Impact Assessment criteria. It particularly contributes to objectives for social inclusion and health.

Improving access to bikes has an important role in supporting a sustainable transport system, by enabling, supporting and encouraging individuals to cycle more often (and to support walking and wheeling where appropriate). This recommendation is, with funding support, readily implementable, making use of activities, initiatives and schemes for which there is already significant experience of implementation in Scotland and elsewhere. Delivery would be undertaken by a range of public and third sector delivery partners.

Details behind this summary are discussed in Section 3, below.



2. Context

2.1. Problems and Opportunities

This recommendation could help to tackle the following problems and opportunities:

Relevant Problem & Opportunity Themes Identified in National Case for Change

- Social Isolation: there is increasing recognition of social isolation and loneliness as major public health issues that can have significant impacts on physical and mental wellbeing. Disabled people in particular can feel trapped due to a lack of accessible transport, particularly on islands and in remote and rural areas.
- Changing Travel Behaviour: changing people's travel behaviour to use more sustainable modes will have a positive impact on the environment, as well as health and wellbeing.
- Physical Activity: the importance of active travel is becoming more evident as the consequences of physical inactivity are studied. It is recognised that one of the most effective ways to secure the required 30 minutes of moderate activity per day is to reduce reliance on motorised transport, changing the means of everyday travel to walking and cycling^{vi}.

2.2. Interdependencies

This recommendation has potential overlap with other STPR2 recommendations and would also complement other areas of Scottish Government activity.

Other STPR2 Recommendations

- Connected neighbourhoods (1);
- Active freeways and cycle parking hubs (2);
- Village-town active travel connections (3);
- Connecting towns by active travel (4);
- Long-distance active travel network (5);
- Behavioural change initiatives (6);
- Increasing active travel to school (8);
- Investment in Demand Responsive Transport and Mobility as a Service (20); and
- Framework for the delivery of mobility hubs (22).

Other areas of Scottish Government activity

- Active Travel Framework (2020)^{vii};
- Cycling Action Plan for Scotland (CAPS)^{viii};
- Town Centre Action Plan (2013)^{ix}; and
- Clean Air for Scotland 2 Towards a Better Place for Everyone (2021)^x.



3. Appraisal

This section provides an assessment of the recommendation against:

- STPR2 Transport Planning Objectives (TPOs);
- STAG criteria;
- Deliverability criteria; and
- Statutory Impact Assessment criteria.

The seven-point assessment scale has been used to indicate the impact of the recommendation when considered under the 'Low' and 'High' Transport Behaviour Scenarios (which are described in Appendix F of the Technical Report).

3.1. Transport Planning Objectives

1. A sustainable strategic transport system that contributes significantly to the Scottish Government's net-zero emissions target

Low Scenario	High Scenario
+	+

Modal shift from car to more sustainable modes of transport (including walking, wheeling and cycling) reduces levels of air pollution and greenhouse gases. <u>Through options delivered as part of this recommendation, higher levels of cycling and active commuting could be achieved</u>^{xi} with some of these journeys being a replacement for car use.

Walking or cycling could realistically substitute for 41% of short car trips, saving nearly 5% of carbon emissions from car travel^{xii}. However, only 35% of Scottish households have access to one or more bikes^{xiii}, significantly limiting the potential for change. Interventions in this recommendation would make cycling more accessible to low-income households and other groups of people commonly excluded from active travel.

41% of bike share users in Scotland have reduced car use as a result of joining a bike share scheme, and 27% would have made their last trip by car or taxi if bike share had not been available^{xiv}.

This recommendation is expected to have a minor positive impact on this objective in both Low and High scenarios.



2. An inclusive strategic transport system that improves the affordability and accessibility of public transport

Low Scenario	High Scenario
+	+

People from lower socio-economic backgrounds are less likely to own a bike and are more likely to live further away from high-quality transport services and infrastructure^{xv}. This recommendation helps provide a low-cost, affordable transport option to a wide range of individuals. Initiatives delivered through this recommendation would target specific sociodemographic groups, including more deprived communities, young people, women, older people, disabled people, and individuals with health problems. Provision of a bike, training and support can improve transport inclusivity for these commonly disadvantaged people.

Access to e-bikes could be improved through this recommendation, which could help older people or those who are less physically fit to take up cycling and could also provide those living in remote or rural areas with improved access to public transport facilities, due to proven ability for longer-distance cycling^{xvi} and helping to facilitate modal shift from the car.

Disabled people are more likely to be physically inactive and socially excluded, so access to e-bikes and accessible cycles can provide increased physical, mental, and social wellbeing, helping to broaden the demographic of people who can access cycling^{xvii}. Care must be taken, however, to ensure scheme design and access requirements are inclusive, especially for public bike-hire schemes.

This recommendation is expected to have a minor positive impact on this objective in both Low and High scenarios.

3. A cohesive strategic transport system that enhances communities as places, supporting health and wellbeing

Low Scenario	High Scenario
++	++

Active travel is beneficial to physical health and mental wellbeing. <u>Keeping physically</u> active can reduce the risk of heart and circulatory disease by as much as 35% and risk of early death by as much as 30% and has also been shown to greatly reduce the chances of asthma, diabetes, lower blood pressure and cancer^{xviii}. Adults who cycle regularly can have the fitness levels of someone up to 10 years younger^{xix}. 66% of users of public cycle hire schemes reported exercise and health benefits and 41% said they chose to use cycle hire to help with mental health^{xx}.

This recommendation would encourage and enable more people to undertake more physical activity more often; existing initiatives already deliver programmes to help make some of the most inactive people (who benefit most from physical activity) to wheel and cycle more.

Interventions can also be effective in supporting and <u>encouraging participation in cycling</u> <u>among under-represented and minority population groups</u> in cycling^{xxi}, helping to support





and enhance Scottish communities. The measures may also, by increasing the number of people out and about within their communities, make a positive contribution to places.

This recommendation is expected to have a moderate positive impact on this objective in both Low and High scenarios.

4. An integrated strategic transport system that contributes towards sustainable inclusive growth in Scotland

Low Scenario	High Scenario
+	+

The yearly costs of owning and using a bike amount to around 5% (or 10% for electric bikes) of the costs of owning and using a car^{xxii}; which is considered a substantial burden for many lower-income households. Bikes can provide an important and essential mode of transport for many people; this recommendation would help provide a low-cost transport option to a wide range of individuals, improving transport choice to enable them to undertake economic, social and leisure activities^{xxii}. Enabling more people to make local journeys by active and public transport modes more often supports inclusive growth by enabling more people to be economically active and also support local businesses and services^{xxiv}. A survey of Paris' Vélib cycle hire system found that 19% of users made trips that would have otherwise been impossible.

<u>Prioritising active modes can have economic benefits</u> and provide better spaces for people to live, work and shop in. Per square metre, cycle parking delivers five times higher retail spend than the same area of car parking. People who cycle do their shopping locally and are more loyal customers^{xxv}.

This recommendation is expected to have a minor positive impact on this objective in both Low and High scenarios.

5. A reliable and resilient strategic transport system that is safe and secure for	
users	

Low Scenario	High Scenario
+	+

This recommendation would provide people with advice, training and information on how to be safe when cycling, through provision of cycle training, bike repair and maintenance, support with buying or loaning safety and security accessories for cycles, like lights, locks and helmets.

All of these contribute to actual safety, competence and general confidence whilst riding. Cycles and equipment that are loaned or purchased via a bike library would have been subject to a thorough check, therefore ensuring that they are fit for use. The provision of





locks would enable people to store a cycle safely, improving cycle security through reduction in theft.

This recommendation is expected to have a minor positive impact on this objective in both Low and High scenarios.

3.2. STAG Criteria

1. Environment							
Low Scenario	High Scenario						
+	+						

See Strategic Environmental Assessment (SEA) below.

This recommendation is expected to have a minor positive impact on this criterion in both Low and High scenarios.

2. Climate Change						
Low Scenario	High Scenario					
+	+					

This recommendation would help generate a modal shift from car to active modes for some journeys and would thus lead to a modest reduction in greenhouse gas emissions.

No impact on the Vulnerability to Effects of Climate Change or Potential to Adapt to Effects of Climate Change is anticipated.

This recommendation is expected to have a minor positive impact on this criterion in both Low and High scenarios.

3. Health, Safety and Wellbeing							
Low Scenario	High Scenario						

This recommendation would provide people with advice, training and information on how to be safe when cycling, through provision of cycle training, bike repair and maintenance, support with buying or loaning safety and security accessories for cycles, for example. lights, helmets, and cycle locks. All of these contribute to safety, competence and general confidence whilst riding, thereby reducing accidents and improving security for cyclists.

Cycles and equipment that are loaned or purchased via a bike library would have been subject to a thorough check, therefore ensuring that they are fit for use. The provision of locks would enable people to store a cycle safely, improving cycle security through reduction in theft.





Social prescribing activities, whereby a health professional would help patients overcome their relevant physical and/or mental health issue through increased walking, wheeling or cycling, would improve health outcomes for those who would benefit most. The resulting increase in rates of active travel would improve health and measures within this recommendation could improve access to health and wellbeing infrastructure, as well as improving personal security because of increased natural surveillance.

Some negative effects on visual amenity as a result of new cycle hire or cycle storage could be anticipated, particularly during the construction period; however, any negative visual effects are unlikely to be significant during operation.

This recommendation is expected to have a moderate positive impact on this criterion in both Low and High scenarios.

4. Economy					
Low Scenario	High Scenario				
+	+				
The yearly costs of owning and using a bike amount to around 5% (or 10% for electric bikes) of the costs of owning and using a car ^{xxvi} ; which is considered a substantial burden for many lower-income households: the cost of an average bike is $£275^{xxvii}$ yet a person over 25 claiming income support gets less than £75 per week and if they are under 25 this falls to less than £60 ^{xxviii} .					
This recommendation helps provide a low-cost transport option to a wide range of individuals, improving transport choice to enable them to undertake economic, social and leisure activities ^{xxix} . A survey of Paris' Vélib cycle hire system found that 19% of users made trips that would have otherwise been impossible ^{xxx} , demonstrating the potential for access to bikes to improve economic participation. Additionally, people who cycle do their shopping locally, visit more often and are more loyal customers ^{xxxi} .					
The recommendation would also provide local employment, training and volunteering opportunities for staff who are involved in delivering intervention and support local economic activity through retailers and suppliers who would provide cycles and equipment.					
No impact on transport economic efficiency is anticipated.					
This recommendation is expected to have a minor positive impact on this criterion in both Low and High scenarios.					

5. Equality and Accessibility						
Low Scenario	High Scenario					
++	++					
••						





Research shows that people experiencing social and economic hardship are less likely to be able to use active modes of travel^{xxxii}. People from lower socio-economic backgrounds are less likely to own a bike and are more likely to live further away from high-quality transport services and infrastructure^{xxxii}.

In Scotland, around <u>one-third of households did not have access to a car in 2019</u>, and a much higher proportion of people cannot drive^{xxxiv}. <u>24% of Scottish children were living in</u> <u>relative poverty in 2017/18</u>^{xxxv}. <u>Disabled people are more likely to be physically inactive</u> <u>and socially excluded</u>, so access to e-bikes and accessible cycles (through public and inclusive cycle hire/access schemes) can provide increased physical, mental, and social wellbeing, helping to broaden the demographic of people who can access cycling ^{xxxvi}.

Initiatives delivered through this recommendation would deliver programmes for specific socio-demographic groups, including young people, women, older people, disabled people, individuals with health problems and from more deprived communities. Provision of a bike, training and support can improve transport inclusivity for these commonly disadvantaged people, by providing low-cost transport choices^{xxxvii}.

Access to e-bikes could be improved through this recommendation, which could help older people or those who are less physically fit to take up cycling, and could also provide those living in remote or rural areas with improved access to public transport facilities, due to proven ability for longer-distance cycling^{xxxviii} and helping to facilitate a modal shift from the car. Research suggests that e-bikes can contribute to normalising cycling for women, to a greater extent than traditional bikes^{xxxix}. As well as this, access to e-bikes can support disabled people into cycling, helping to broaden the demographic of people who can access cycling^{xl}.

No impact on active travel or public transport network coverage is anticipated.

Also refer to EqIA/ICIA/FSDA/CRWIA Assessment in the next section.

This recommendation is expected to have a moderate positive impact on this criterion in both Low and High scenarios.

3.3. Deliverability

1. Feasibility

Access to bike initiatives are already feasible, with the existence of many established or developing community-led cycling and bike access initiatives in Scotland. There is significant third sector and public experience in implementing access to bikes initiatives. The role of Transport Scotland would be to support and facilitate implementation through funding.

However, the feasibility in any specific location or community remains to be tested, and much detailed development work and local decision-making is required to identify the most appropriate initiatives to be delivered, in line with local circumstances and needs.



2. Affordability

This recommendation would require ongoing public sector funding if it is to effectively maintain its reach to target communities. Given the potential scale of investment that may be required, further assessment would be required to determine the most appropriate initiatives to deliver in any given location or community. This may be a determining factor for which initiatives are rolled out where.

3. Public Acceptability

Existing access to bikes initiatives have broad public support both from private and public businesses and organisations, who help facilitate and advocate their use, and who support their reach to more people^{xli}. Initiatives are generally well supported in the local communities that they operate in. It is therefore expected that access to bikes initiatives within this recommendation would have broad public support.

3.4. Statutory Impact Assessment Criteria

1. Strategic Environmental Assessment (SEA)

Low Scenario	High Scenario
+	+

This recommendation would likely result in positive effects on greenhouse gas reduction (Objective 1) and improving air quality (Objective 3) SEA objectives due to promoting a modal shift to more sustainable active travel options for functional and recreational journeys and, as a result, a reduction in emissions and improvement in air quality. Positive effects would be anticipated on four SEA Objectives that fall under the population and human health SEA topic. These objectives are related to quality of life and sustainable accessibility, noise and vibration, the public realm and safety (Objectives 4 to 7). The positive scores are derived from an expected increase in users choosing more sustainable travel to access essential services.

Due to the modal shift to cycling, there would also be a slight reduction in wear and tear and need for maintenance of the road network, which would in turn reduce raw material requirements and hence help to reduce natural resources (Objective 9).

Studies have suggested that walking or cycling could realistically substitute for 41% of short car trips, saving nearly 5% of carbon emissions from car travel^{xlii}. However, only 35% of Scottish households currently have access to one or more bikes^{xliii}, significantly limiting the potential for change without interventions to reduce barriers to cycle ownership. No significant effects are anticipated for the remaining SEA objectives, including water, biodiversity, soil, cultural heritage and landscape and visual amenity (Objectives 9 to 14) as minimal hard infrastructure is required. However, any new infrastructure, such as bike storage facilities, would need to complement and integrate with the existing townscape setting, including any cultural heritage assets. Further environmental assessment or consultation with Historic Environment Scotland and NatureScot may therefore be required.

A negligible effect is predicted for Objective 2 as there is unlikely to be a significant influence on this receptor.





Overall, this recommendation is expected to have a minor positive effect against this criterion in both Low and High scenarios.

2. Equalities Impact Assessment (EqIA)		
Low Scenario	High Scenario	
++	++	
This recommendation provides the opportunity for affordable access to bikes, which in turn would improve access to services. This includes access to employment, education, health facilities and other transport services which are important to many groups including those with protected characteristics, who are targeted through this recommendation, including those living in island communities and in rural / remote areas.		
Through providing access to e-bikes, specialist and adapted cycles for specific groups with mobility issues, such as disabled people and older people, the bike provision would lead to improvements in regard to equality of opportunity for these groups.		
An increase in active travel may improve health outcomes through physical fitness and mental wellbeing benefits and is also likely to lead to air quality improvements if the uptake is matched by a reduction in private vehicle use and traffic congestion. Improved health outcomes as a result of better air quality are of particular benefit to those who are more vulnerable to air pollution, including children, older people and disabled people.		
However, the extent to which groups with protected characteristics would benefit from this recommendation would depend on the location of the bike libraries and bike storage facilities (in regard to both community access and proximity of cycle networks and require services), the ease of accessing subsidies and their promotion, and the uptake of social prescribing by healthcare professionals.		

This recommendation is expected to have a moderate positive impact on this criterion in both Low and High scenarios.

3. Island Communities Impact Assessment (ICIA)		
Low Scenario	High Scenario	
+	+	
As with the Eq.A assessment, there are notential benefits for island communities to have		

As with the EqIA assessment, there are potential benefits for island communities to have access to more affordable access to bikes (with knock-on improvements in regard to access to essential services and recreation). However, the extent to which island communities would benefit from bike provision would depend on the extent of the provision on islands, the location of the bike libraries and bike storage facilities, the ease of accessing subsidies and their promotion, and the uptake of social prescribing by healthcare professionals.

This recommendation is expected to have a minor positive impact on this criterion in both Low and High scenarios.





4. Children's Rights and Wellbeing Impact Assessment (CRWIA)		
Low Scenario	High Scenario	
++	++	
++	++	

This recommendation would deliver initiatives based on individual communities' needs; this includes signposting to, or delivering, active travel initiatives for children, helping them to benefit from access to bikes.

Children can have much to benefit from access to bikes, such as through the free cycles for schoolchildren scheme, though <u>people under the age of 16 are often excluded from</u> <u>public bike-hire schemes</u> due to safety implications and need for payment via a bank account^{xliv}. Careful consideration of these matters is required for future scheme design.

This recommendation is likely to lead to significant improvements for children due to improvements in health from increased physical exercise and improved mental wellbeing (with benefits for educational performance); improved air quality if the uptake in active travel is accompanied by a decrease in private vehicle use and traffic congestion; more affordable access to bikes (having a positive knock-on effect for access to education and other services); and the consequential effects of improved access to bikes and therefore services for the whole community (such as parent and carer access to employment). However, the extent to which this recommendation would improve outcomes for children would depend on the location of the bike libraries and bike storage facilities, the ease of accessing subsidies and their promotion, and the uptake of social prescribing by healthcare professionals.

This recommendation is expected to have a moderate positive impact on this criterion in both Low and High scenarios.

5. Fairer Scotland Duty Assessment (FSDA)	
Low Scenario	High Scenario
++	++

Beneficiaries of this recommendation are likely to include deprived communities. The potential reach of this recommendation is wide-ranging, including urban, rural and island communities, with consequential positive effects on access to services. As well as benefitting these 'communities of place', the recommendation is likely to additionally improve access to services for 'communities of interest', including those with lower access to private vehicle use (such as women, young people and low-income households) and others who may benefit from less costly travel options.

However, the extent to which this recommendation would reduce inequalities of outcome would depend on the location of the bike libraries and bike storage facilities (in regard to both the ability for those from deprived and disadvantaged communities to access these, as well as the proximity of cycle networks and required services), the ease of accessing subsidies and their promotion, and the uptake of social prescribing by healthcare professionals.





This recommendation is expected to have a moderate positive impact on this criterion in both Low and High scenarios.

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References

ⁱⁱⁱ UK Government, Social prescribing: applying All Our Health, <u>https://www.gov.uk/government/publications/social-prescribing-applying-all-our-health/social-prescribing-applying-all-our-health</u>

^{iv} Access To Bike Schemes in Scotland – Cycling Scotland <u>Cycling Scotland --</u> access to bikes report -- 2020-07-16 (FINAL)

^v COMO UK, Bike Share Procurement Guidance, 2018, <u>https://como.org.uk/wp-content/uploads/2018/06/Bike-Share-Procurement-Guidance-HI-</u> RES.compressed.pdf

^{vi} Scottish Government, Preventing Overweight and Obesity in Scotland Strategy, 2010, <u>https://www.gov.scot/publications/preventing-overweight-obesity-scotland-route-maptowards-healthy-weight/</u>

vii Transport Scotland, Active Travel Framework, 2020,

https://www.transport.gov.scot/active-travel/active-travel-framework/

viii Transport Scotland, Cycling Action Plan for Scotland 2017 – 2020, 2017, <u>https://www.transport.gov.scot/publication/cycling-action-plan-for-scotland-2017-2020/</u>

Scottish Government, Town Centre Action Plan: Scottish Government response, 2013, <u>https://www.gov.scot/publications/town-centre-action-plan-scottish-government-response/</u>

^x Clean Air for Scotland 2 – Towards a Better Place for Everyone <u>https://www.gov.scot/publications/cleaner-air-scotland-2-towards-better-place-</u> everyone/

^{xi} Department for Transport, CWIS Active Travel Investment Models- Overview of evidence on increasing active travel,

2019: <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/a</u> <u>ttachment_data/file/846325/appendix_4_Overview_of_evidence_on_increasing_activ</u> e_travel.pdf

^{xii} A. Neves, C.Brand, Assessing the potential for carbon emissions savings from replacing short car trips with walking and cycling using a mixed GPS- travel diary approach. Transport Research Part A: policy and practice, 2019,

https://www.sciencedirect.com/science/article/pii/S0965856417316117

^{xiii} Annual Cycling Monitoring Report 2020, Cycling Scotland <u>https://www.cycling.scot/mediaLibrary/other/english/8674.pdf</u>

xiv COMO UK, Scotland Bike Share Users Survey, 2020: <u>https://como.org.uk/wp-content/uploads/2021/03/CoMoUK-Scotland-Bike-Share-Survey-2020.pdf</u>

^{xv} Sustrans, Our position on public cycle share schemes, accessed 2021: <u>https://www.sustrans.org.uk/our-blog/policy-positions/all/all/our-position-on-public-cycle-share-schemes#_edn2</u>

^{xvi} Cairns, S., Behrendt, F. Raffo, D., Beaumont, C. and Kiefer, C. (2017), 'Electrically-assisted bikes: Potential impacts on travel behaviour', Transportation Research Part A, 103 pp. 327-342





^{xvii} Wheels for Wellbeing, A guide to inclusive cycling,2019: https://wheelsforwellbeing.org.uk/wp-content/uploads/2019/06/FINAL.pdf xviii Cleaner Air for Scotland 2 – Towards a Better Place for Everyone, https://www.gov.scot/publications/cleaner-air-scotland-2-towards-betterplace-everyone/pages/5/ xix Sustrans, Health benefits of cycling and walking, https://www.sustrans.org.uk/ourblog/get-active/2019/everyday-walking-and-cycling/health-benefits-of-cycling-andwalking#:~:text=Getting%20out%20walking%20or%20cvcling.vour%20general%20h ealth%20and%20wellbeing ^{xx} COMO UK, Scotland Bike Share Users Survey, 2019/20: https://como.org.uk/wp-content/uploads/2020/03/CoMoUK-Bike-Share-Survey-2020-FINAL compressed-1.pdf xxi https://www.gcph.co.uk/assets/0000/7743/Bikes for All evaluation report.pdf xxii European Cyclist's Federation (ECF) – The Benefits of Cycling https://www.ecf.com/sites/ecf.com/files/TheBenefitsOfCvcling2018.pdf xxiii European Cyclist's Federation (ECF) – The Benefits of Cycling https://www.ecf.com/sites/ecf.com/files/TheBenefitsOfCycling2018.pdf xiv Going Smarter, Derek Halden for Transport Scotland, 2013 xxv European Cyclist's Federation (ECF) – The Benefits of Cycling https://www.ecf.com/sites/ecf.com/files/TheBenefitsOfCycling2018.pdf xxvi European Cyclist's Federation (ECF) – The Benefits of Cycling https://www.ecf.com/sites/ecf.com/files/TheBenefitsOfCycling2018.pdf xxvii https://transformscotland.org.uk/wp/wp-content/uploads/2018/02/Transform-Consulting-The-Value-of-Cycling-to-the-Scottish-Economy.pdf xxviii https://www.gov.uk/government/publications/benefit-and-pension-rates-2019-to-2020/proposed-benefit-and-pension-rates-2019-to-2020#income-support xxix European Cyclist's Federation (ECF) – The Benefits of Cycling https://www.ecf.com/sites/ecf.com/files/TheBenefitsOfCvcling2018.pdf xxx European Commission Mobility and transport, Clean transport, urban transport 6.1 Bicycle Sharing schemes, including rental, accessed 2021: https://ec.europa.eu/transport/themes/urban/cycling/guidance-cycling-projectseu/cycling-measure/bicycle-sharing en xxxi Walking and Cycling: the benefits for Dundee, https://dundeecity.gov.uk/sites/default/files/publications/benefits_of_active_travel_in_ dundee.pdf xxxii Review-of-Smarter-Choices-Smarter-Places.pdf (improvementservice.org.uk) xxxiii Sustrans, Our position on public cycle share schemes, accessed 2021: https://www.sustrans.org.uk/our-blog/policy-positions/all/all/our-position-on-publiccycle-share-schemes# edn2 xxxiv Scottish Government, Scottish Household Survey, 2019, https://www.gov.scot/publications/scottish-household-survey-2019supplementary-analysis/pages/6/ xxxv Child Poverty: scale, trends and distribution in Scotland. NHS Health Scotland, 2019 http://www.healthscotland.scot/media/2607/child-poverty-scales-andtrends.pdf





 ^{xxxvi} Wheels for Wellbeing, A guide to inclusive cycling, 2019: <u>https://wheelsforwellbeing.org.uk/wp-content/uploads/2019/06/FINAL.pdf</u>
^{xxxvii} <u>https://www.gcph.co.uk/assets/0000/7743/Bikes_for_All_evaluation_report.pdf</u>
^{xxxviii} Cairns, S., Behrendt, F. Raffo, D., Beaumont, C. and Kiefer, C. (2017),
^{*}Electrically-assisted bikes: Potential impacts on travel behaviour', Transportation Research Part A, 103 pp. 327-342
^{xxxix} COMO UK Shared Electric Bike Programme Report 2016

https://como.org.uk/wp-content/uploads/2018/05/Shared-Electric-Bike-Programme-Final-Report.pdf

xI Wheels for Wellbeing, A guide to inclusive cycling,

2019: https://wheelsforwellbeing.org.uk/wp-content/uploads/2019/06/FINAL.pdf

xli Access To Bike Schemes in Scotland – Cycling Scotland <u>Cycling Scotland --</u> access to bikes report -- 2020-07-16 (FINAL)

^{xlii} A. Neves, C.Brand, Assessing the potential for carbon emissions savings from replacing short car trips with walking and cycling using a mixed GPS- travel diary approach. Transport Research Part A: policy and practice,

2019, https://www.sciencedirect.com/science/article/pii/S0965856417316117 x^{liii} Cycling Scotland Annual Monitoring Report, 2020

https://www.cycling.scot/mediaLibrary/other/english/8674.pdf

xliv Sustrans, Our position on public cycle share schemes, accessed 2021 https://www.sustrans.org.uk/our-blog/policy-positions/all/all/our-position-on-publiccycle-share-schemes#_edn2

