Promoting Low Car Neighbourhoods in Scotland

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Contents

1. About the Review 3
2. Defining Low Car Neighbourhoods 4
3. The Benefits of Low Car Neighbourhoods 5
4. Designing Low Car Neighbourhoods 8
5. Using Car Clubs to Reduce Car Dependence 11
6. Parking and Mobility: The Need for a Place Based Approach 13
7. Promoting Low Car Neighbourhoods in Scotland 15
8. Low Car Neighbourhoods: Challenges and Opportunities 19
9. Emerging Practice and Learning Opportunities 22
10. Conclusions & Recommendations 24
11. Appendix A - National Policies 26
12. Appendix B - Local Development Plans 35
13. Appendix C – Potential Case Studies 56

Executive Summary

Introduction

A large number of people in Scotland live without owing a car. Across the UK, one third of households are identified as car free. Yet, the majority of the population live in neighbourhoods where streets are designed predominantly for the private car. Moreover, people experiencing the worst travel opportunities suffer the worst effects of other people's private car use. This is in contrast to national planning, health, environment and equality policy aims. Evidence shows that a healthy neighbourhood is a walkable neighbourhood.

For many years it has been known that the need to travel by car can be significantly reduced through the creation of mixed use neighbourhoods with interconnected streets. This is reflected in national planning policy in Scotland where the overall aim is to encourage well designed places where everyday needs such as schools, shops, public transport are within walking distance of most residents.

Air pollution and the environmental impacts of car use may be reduced by the adoption of cleaner fuels and electric vehicles. However, preventable deaths, injuries and the risks to health associated with inactivity and car dependency can only be addressed in the long term by the creation or retrofitting of connected neighbourhoods where facilities can be accessed by foot or by bike. For longer trips (3miles +), or where luggage is transported, a car club offers the benefits of travel by private car whilst minimising the negative impacts. Access to a car through car clubs or trip sharing, reinforces lifestyles that are non-car dependent.

This review aims to establish if more walkable neighbourhoods with low levels of private car ownership can be encouraged by way of good planning policies and well-designed housing developments across Scotland.

Key Findings & Recommendations

Planning policy and guidance in Scotland seeks to avoid the creation of single use, mono-density neighbourhoods where the private car is the only form of transport. Despite clear policy statements from national and local government and tools designed to create low car neighbourhoods our search for case studies indicates that very few developments in Scotland actually deliver those ambitions.

There are challenges in setting specific targets for developments in terms of density, although some local authorities prescribe maximum rather than minimum parking standards. Policies generally refer to active travel and car clubs as measures that developers 'should consider' rather than 'must do'. Change is urgent given the lead in time for new developments and potential changes to the planning status of supplementary guidance.

The planning system in Scotland should be an enabler of high quality evidence-based design and development. Giving landowners, housebuilders, planners and communities the tools to create places which are walkable, connected, and healthy and are pleasant to live and work in is a policy priority. There is some evidence that such developments carry a premium – they are places where people want to live.

To meet Scottish Government outcomes, a more robust approach to enabling low car and car free development is needed. Measures such as the identification of local development sites which are already well connected, prescriptive modal share targets which include car clubs and design that supports car club provision are all achievable in the short term.

To increase the creation of low car neighbourhoods the following actions are required:

1. Consider future travel patterns using tools such as the Place Standard as well as conventional transport assessments.
2. Strengthen the position and wording of policies to promote active travel and car clubs moving from something developers should consider to steps they must take. A requirement on developers to engage in pre-application discussions about modal split, walking routes and seek advice from car club operators on the viability of new bays.
3. Promotion of car clubs and their benefits to statutory and other consultees in the planning process e.g. community councils, community planning partnerships, civic trusts and voluntary organisations. These organisations play a key role in the creation of new neighbourhoods and the revitalisation of sites.
4. The inclusion of specific mode share targets in both local transport plans and corresponding land use plans for car club use. Targets on car ownership should also be considered in well-connected city centres, where parking and congestion is a problem.
5. Introduction of a tariff schedule which includes car club provision for developer contributions (e.g. Section 75 agreements) in the short term, with a view to including car clubs in any future national replacement for funding transport infrastructure in new development.

1. About the Review

1.1. This review is phase one of a project by Living Streets Scotland, in partnership with Carplus Scotland, to determine if more developments that support high levels of walking and low car ownership can be encouraged across Scotland.

1.2. The objectives are:

- Identify if existing planning policies deliver developments that support and encourage walking to local shops and facilities.
- Assess whether developments are designed in a way that reduces car dependence and promotes active travel, particularly through making car clubs viable and by designing walking friendly neighbourhoods.
- Understand the assumptions made by planners and developers when considering key factors such as location, density and parking provision for new housing developments.
- Identify potential case studies highlighting practices to encourage low car ownership or use neighbourhoods, to be explored in a further research phase.
- Make recommendations on how policies and practices can be improved to encourage developments that reduce car use, promote active travel and behaviour change.

1.3. The review is comprised of desk based research to identify the key factors which contribute to higher levels of walking and reduced car dependence. It also outlines the key policies in Scotland that promote walking and reduced car use in Appendices A and B.

1.4. Appendix B summarises Local Development Plans from Scotland's local authorities to identify key policies related to the promotion of walking in new developments and policy support for car clubs. Major development sites with the potential to design for active travel are identified.

2. Defining Low Car Neighbourhoods

2.1. In UK planning policy and discourse two terms are used, often interchangeably, to define low car neighbourhoods – car free and low car.

2.2. The term car free usually refers to an area of development where vehicle traffic is excluded from entering – for example, by designing out vehicle access to a residential courtyard or, more usually, via the absence of parking by preventing residents from applying for parking permits.

2.3. The term low car usually refers to an area of development where reduced parking provision is the defining feature. This review uses a definition of low car development outlined by Dr Steve Melia, Senior Lecturer in Transport & Planning, at the University of West England:

2.4. Low car neighbourhoods are residential or mixed use developments that:

- Normally provide a traffic free immediate environment, and:
- Offer limited parking separated from the residence, and:
- Are designed to enable residents to live without owning a car

3. The Benefits of Low Car Neighbourhoods

3.1. There are currently over 2.9 million licensed vehicles in Scotland – the highest number ever recorded – and around 64% of all journeys are made by car.[1] This is set against a wide body of evidence that dependency on travelling by car has significant negative impacts on personal and public health, quality of life and the environment.

3.2. These impacts – and the will to move towards sustainable forms of mobility underpin key national planning policies and guidance publications. These are summarised in Appendix A. Of particular importance is the Scottish Government's commitment to putting the pedestrian first and promoting:

"Development that considers place and the needs of people before the movement of motor vehicles."[2]

3.3. The benefits of creating low car neighbourhoods are an identified national planning priority:

"Opportunities for walking and cycling should be planned into all new residential areas making urban areas more attractive and safer for pedestrians and cyclists."[3]

3.4. Creating Places, the Government's policy statement on architecture, strengthens this priority and emphasises the impact of our surroundings on the travel choices we make:

"Sustainable places are often characterised by well-designed, walkable mixed-use neighbourhoods with integrated facilities… These types of places can play a role in reducing our carbon emissions and are a considerable impetus for healthier lifestyle choices. Our decision to make journeys on foot or by car is often determined by the layout of our surroundings."[4]

National Priorities

3.5. This focus in design policy helps to deliver a range of high level national outcomes

- Live longer healthier lives.
- Live in well-designed, sustainable places where we are able to access the amenities and services we need.
- Value and enjoy our built and natural environment and protect it and enhance it for future generations.
- Reduce the local and global environmental impact of our consumption and production.
- Tackle the significant inequalities in Scottish society.

[1] Scottish Transport Statistics No.35 2016
[2] Scottish Government, Scottish Planning Policy, 2014
[3] Scottish Government, Scottish Planning Policy, 2014
[4] Scottish Government, Creating Places: A policy statement on architecture and place for Scotland, 2013

Road Safety

3.6. Scotland has challenging road safety targets aiming to reduce road fatalities by 40 per cent (2004 baseline) by 2020. For cyclists and pedestrians the majority of casualties occur in urban areas. Fewer journeys by car or the use of alternative modes could contribute to meeting these targets.

Health

3.7. A review of 28 health impact studies related to active travel and less car use found people who switched to active modes of travel received substantial health benefits from increased physical activity.[5] This is significant as Scotland has some of the highest levels of obesity amongst men and women across OECD countries.

Inequality and Access to Housing and Employment

3.8. Over 70% of households in Scotland have a car. However, one in five men and one in three women do not drive in Scotland.[6] For people claiming income support or jobseeker's allowance car access figures are even lower. Almost two thirds of claimants do not have access to a car.[7] For low income households with a private car the total cost of ownership (c. £6,000 a year) can amount to a quarter of household income. For people on a low or average income the share of disposable income used to meet the costs of car ownership is far greater than the 10% threshold set for fuel poverty. It follows that affordable housing that is car dependant will not meet policy aims. These problems are acute in rural areas.[8]

Social Inclusion and Wellbeing

3.9. High levels of car use within towns and cities can have negative social impacts and increase social isolation. This has been evidenced for decades. A study in 1969 by Donald Appleyard in San Francisco recorded the number of people living on roads with varying traffic levels. This study methodology was repeated in 2008 in Bristol and again found a strong correlation between living beside busy roads and social isolation. Researchers also found residents tried to minimise the impact of traffic which in turn reduced quality of life further – such as restricting living to the back of the house and curtailing the freedom of their children. Meanwhile, anyone too old, young, poor or unwell to have access to a car has diminished access to local services.

Air Pollution

3.10. Health threats from air pollution from private vehicles is one of the strongest arguments for urgent action to reduce car dependency. Elevated pollution levels are associated with a range of health problems. These include heart disease, asthma, lung cancer and changes associated with dementia. In the UK, air pollution is estimated to

[5] European Commission, Science for Environment Policy, November 2016
[6] Scottish Household Survey 2014
[7] Sustainable Development Commission: Fairness in a Car Dependent Society, 2011
[8] RAC, Low Income Motoring, 2009

cause 40,000 deaths each year.[9] Again, there is an equality impact as this is most acute in lower income areas which suffer from higher levels of pollution, despite lower car ownership.[10] Creating settlements that reduce the need to travel by car is therefore critical to tackling air pollution.

Summary of the Benefits of Low Car Neighbourhoods

3.11. **The benefits of low car neighbourhoods are measurable at individual, local and national level and are recognised in key national policies in Scotland. Communities where people can access everyday needs without owning a car are less traffic congested, enjoy better local air quality, are safer, healthier and more sociable and inclusive. In short, they are the places where people want to live.**

[9] Royal College of Physicians, Every Breath We Take: The Lifelong Impact of Air Pollution, February 2016
[10] Sustainable Development Commission: Fairness in a Car Dependent Society, 2011

4. Designing Low Car Neighbourhoods

4.1. Reducing private car dependency creates clear benefits for neighbourhoods and the people who live in them. However, streetscapes are still predominantly designed and financed with vehicle movement and parking as a priority. This is in contrast to detailed national guidance on street design such as Designing Streets: A Policy Statement for Scotland which advocates a design-led approach to reducing car dominance:

"Good street design can promote a better quality of living for everyone. Sustainable patterns of behaviour can be influenced greatly by the intelligent design of streets… Creating good streets is not principally about creating successful traffic movement: it is about creating successful places."[11]

4.2. National policy recognises that designing low car neighbourhoods is rooted in creating successful places. Some local authorities have produced local guidance on design which reflects national ambitions and these are noted in Appendix C. An example guide from Glasgow City Council is outlined in Fig. 1. The guidance, however, relies on a street user hierarchy which puts pedestrians first and private motor vehicles last rather than prescriptive design codes. The hierarchy seeks to produce a design that increases the attractiveness of walking, cycling and using public transport:

"Walking is the most sustainable form of transport. Streets should be designed, not only to allow for walking, but to actively encourage it to take place. The propensity to walk is influenced not only by distance, but also by the quality of the walking experience."[12]

[11] Scottish Government, Design Streets: A Policy Statement for Scotland, 2010
[12] Scottish Government, Design Streets: A Policy Statement for Scotland, 2010

Fig. 1

Design Guide for New Residential Areas, Glasgow

In 2013 Glasgow City Council published a Design Guide for New Residential Areas which aimed to build on the guidance set out in Designing Streets. It stipulates that new developments should create networks of streets, places and paths to encourage walking and cycling. 20mph limits and specific road design guidance is recommended as the norm to slow vehicle traffic rather than speed bumps.

The Guide clarifies that good public transport should be available at the initial phase of any development, either by linking to existing services or providing new routes. Pedestrian and cycle routes should also be linked to public transport. Proposed bus routes and bus stops should be marked on planning applications to ensure connectivity is considered early on.

By producing more detailed design guidance, Glasgow City Council is aiming to facilitate dialogue with developers - making recommendations on car parking provision and layout, street width, open space and the use of shared surfaces as a starting point for discussion, smoothing the planning process to create well-designed places.

4.3. Designing Streets does promote a number of evidence-based design practices which reduce car dependency but again, these are advisory. Measures include:

- Influencing driver behaviour by designing-in low speed roads
- Ensuring good connectivity and permeability for all street users
- Walkable access and direct routes to local amenities
- Design solutions which encourage social interaction
- Higher density developments which can be well served by public transport

4.4. A Scottish Government evaluation of Designing Streets in 2012/13 identified some barriers to implementation at local level including lack of practitioner understanding, availability of resources, compliance and maintenance issues and applicability to rural development.[13]

4.5. Alongside Designing Streets and local policies, the Place Standard (Fig. 2) aims to influence design and help balance the top-down approach to development. Case studies of specific developments where the Place Standard tool has been applied would provide evidence of what works in the design of low car neighbourhoods. Such case studies could also develop quantitative and qualitative measures for assessing success. To support the translation of design ambitions into practice it is suggested that more robust street design policy is considered and incorporated into planning legislation with monitoring for compliance at local level.

[13] Scottish Government, The Implementation of Designing Streets Policy Across Scotland, 2013

Fig. 2

The Place Standard

The Place Standard was launched at the end of 2015 by the Scottish Government, Architecture and Design Scotland and NHS Health Scotland. The Standard is designed for use by organisations – including local authorities, developers, architects and communities.

The Standard has 14 elements that cover the physical and social aspects of a place and aims to ensure that "all places in Scotland nurture the wellbeing of the people within them." To do this the Standard describes what makes a sustainable place and the supporting actions and processes which deliver places of high quality.

The Standard is intended to be used to bring about design and management changes to improve the quality of existing places and to influence new developments to help reduce health inequalities.

It is envisaged that the Place Standard will be used by planners to inform local development plans and masterplan briefs and that developers will use the tool as a way of developing site briefs and design proposals.

Summary of Designing Low Car Neighbourhoods

4.6. **Appendix A demonstrates that Scotland has a strong collection of policy documents which promote forms of development that reduce car dependence and promote active travel. However, when transferred to local level policies are predominantly advisory rather than prescriptive and are rarely translated into design. This is a reflection of ambitions framed in terms of 'should' rather than 'must' do.**

5. Using Car Clubs to Reduce Car Dependence

5.1. Car clubs provide access to pay-as-you-drive cars and vans parked in publicly accessible locations. This can play an important role in ameliorating the negative impacts of private car dependency - whilst increasing public access to all forms of transport and supporting travel behaviour change.

5.2. In summary, the role of car clubs is to:

- Reduce private car ownership and use
- Improve air quality across Scotland
- Increase access to and normalise electric vehicles
- Enable members to drive less
- Support sustainable travel choices

5.3. Carplus surveys demonstrate strong evidence of the benefits of car clubs to members, local communities and national policy outcomes. These benefits increase exponentially as car club numbers and membership grows. In Scotland, thanks to support from Transport Scotland, 11,000 people are now members of car clubs and the number of clubs have substantially increased over the past seven years – from car clubs in 3 locations in 2010 to 31 as at March 2017. Carplus estimate that around 350,000 people in Scotland would change their transport behaviour and join a car club, if the option was available.

Car Clubs and Reduced Car Use

5.4. Every car club vehicle replaces at least 4 private cars and is used by an average of 35 members. Annual mileage for households with car club membership is 513 miles less than the Scottish average.[14]

Car Clubs and Emission Reduction

5.5. Increasingly, car clubs are offering electric vehicles which emit neither CO_2 nor air pollutants. Car clubs are making a significant contribution towards the mainstreaming of electric vehicles and the Scottish Governments' commitment to the decarbonisation of Scotland's roads by 2050. The majority of privately owned vehicles on Scotland's roads do not meet the latest emissions standards. The average carbon emissions of a car club car in Scotland in 2015 was 50% lower than the average UK car.[15]

Road Safety

5.6. Car club cars are also safer than the average car: 89% of the Scotland fleet meets the NCAP 5+ Star or 5 Star standards, the highest rating in terms of occupant safety and

[14] Carplus, Annual Survey of Car Clubs in Scotland, March 2017
[15] Carplus, Annual Survey of Car Clubs in Scotland, March 2017

pedestrian protection.[16] Increasing the number of safe vehicles on the roads will reduce the enduring traffic accident statistics.

Accessible and Inclusive

5.7. The average car club vehicle in Scotland is used by 35 members, whereas the average privately owned car is used by just 1 or 2 people. Car club vehicles are better utilised than cars in private ownership, spending more time in use than the average vehicle. They also offer access to a much wider range of users – for example, individuals, families, tourists, businesses, local authorities and other public organisations.

Support Sustainable Forms of Commuting

5.8. Car clubs are rarely used for commuting - just 2% of members report travel to work or education as a purpose of their last car club journey.[17] By comparison, 23% of all car trips made in Scotland each day are for commuting. This indicates that car club members choose to live in locations where travel to work by sustainable modes is viable, by foot, bike or public transport. Meanwhile, car clubs are an increasingly attractive option for employers meaning that employees don't need to bring their own car to work for business use, reducing the traffic on our roads and potentially freeing up parking spaces.

Summary of Using Car Clubs to Reduce Car Dependence

5.9. **Car clubs are an important tool in creating low car neighbourhoods. Evidence suggests growing car clubs at a neighbourhood level will deliver a range of benefits in terms of emissions, congestion safety and wider access to mobility.**

[16] Carplus Annual Survey of Car Clubs in Scotland, 2016

6. Parking and Mobility: The Need for a Place-based Approach

6.1. The University of Edinburgh, in partnership with a commercial architecture practice, carried out an in depth study of parking measures in several suburban developments in Kent. They found that most new housing developments have more car parking space than cars despite adhering to local policies on maximum parking provision. Moreover, the areas where people were dissatisfied related to traffic safety, road width, design and parking. [18]

Car Parking Assumptions

6.2. Through residents' surveys they tested the assumption that if you provided less parking, you could build to higher densities and people would own fewer cars, walk and use public transport. The researchers found that despite under-utilised bays parking, 80% of people still believed there was inadequate parking on the estate. The researchers concluded that people on suburban estates regard the car as essential and aspire to one car per adult. In the same study, a quarter of people said that lack of parking would put them off owning a car whilst almost no one (7%) agreed with the statement that they would get rid of their car if public transport were improved. This indicates that provision of parking strongly influences behaviour change.

6.3. The study also theorised that one reason for residents prioritising car use related to the layout of the new estates which were internally walkable but had poor walking links to surrounding areas. This supports theories that the distance between parking and home be as far as the distance between home and the nearest public transport stop.

Car Parking in Practice

6.4. The researchers found that in all but one of the case studies cars were parked where they shouldn't be - on pavements, verges, garden lawns and landscape areas. These issues are common and have led to a consultation on 'Improving Parking in Scotland' (March 2017). To avoid negative consequences associated with a lack of parking, planners need to look at all travel choices people make – particularly good walking links. Car clubs can further reinforce lifestyles where owning a car and easy access to a parking space aren't considered essential.

6.5. Designers also need to consider locations and built forms (e.g. adequate density) that make car clubs viable. This requires early engagement in the planning process and is not simply about provision of bays. Tools such as the Place Standard can complement conventional approaches focused on themes including moving around, public transport and traffic and parking.

Summary of parking and mobility

6.6. **Neighbourhoods where car clubs are present benefit from less car use overall. There is less pressure on parking and more residents are using ultra low emission vehicles.**

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[18] The University of Edinburgh et al., Space to Park, November 2013

Residents are also less likely to drive to work and contribute to peak time congestion and air pollution concentrations. Assumptions regarding parking provision and use do not translate into reality. Successful parking provision is very much place based and must be designed around other travel options and choices.

7. Promoting Low Car Neighbourhoods in Scotland

7.1. Policies need to influences several factors to reduce car dependency and support viable car clubs. These have been summarised by researchers as:[19]

- Population density
- Availability of public transport
- Parking constraints
- Car ownership levels
- Socioeconomic/demographic characteristics
- Cultural factors

Car Parking Provision

7.2. A key factor that ensures car clubs are an appropriate addition then, as well as attracting the kind of occupants likely to use a car club to developments, is local policy on parking provision and how it is delivered. Local authorities in Scotland specify parking standards, i.e. the minimum or maximum number of car parking spaces they expect to see included in planning applications. These are most often related to the number of bedrooms per unit in the case of a residential scheme.

Reducing Car Ownership

7.3. Parking constraints are identified as an effective way of reducing car ownership.[20] A recent study analysed Norwegian national travel data and concluded that parking availability in Norway affects the likelihood of choosing to travel by car. This hypothesis held whether people encountered parking restrictions at work, at home and from the starting point to destination of any daily trip. The study also found that the effect of restrictive car parking standards is further increased when combined with parking charges.[21]

The Role of Policy

7.4. As discussed in chapter 4, active travel policy, including car clubs, in Scotland is delivery dependent on local policies and/or individual officers. This is via local development plans, supplementary planning guidance – which can currently be of uncertain status - and local transport plans. Appendices A and B show where car clubs feature in national and local policy. Policy relating to car clubs is in the form of guidance and does not form part of statutory planning policy. Parking standards are more prominent but this results in variability across local planning authorities. The

[19] University of West England/Carplus Trust, Car Clubs in New Developments, April 2016
[20] University of West England/Carplus Trust, Car Clubs in New Developments, April 2016
[21] Petter Christiansen et al, Parking facilities and the built environment: Impacts on travel behaviour, Institute of Transport Studies, November 2016

future of supplementary guidance is currently under review as part of the Scottish governments planning review.

Car Club Policies in Practice

7.5. Some local authorities have fairly clear statements on car clubs, for example the City of Edinburgh Council and Aberdeen City Council – see Fig. 3 - whilst other local authorities do not mention car clubs at all.

Fig. 3

Car Club Policy, Aberdeen

Local policy regarding car clubs in Scotland is most often contained with the Local Transport Strategy for the area. Aberdeen City Council, for example, has an explicit objective in its Local Transport Strategy 2016 -2021:

"To continue to facilitate and promote the car club in order to provide transport choice without necessitating individual car ownership."

Car clubs are also promoted in the Aberdeen Local Transport Strategy as a way to increase uptake of ultra-low emission vehicles.

This is in contrast to London where many boroughs have a stand-alone policy on car clubs which outlines relevant planning and design policy and highlights areas suitable for car club development – particularly in new developments.

7.6. Where there is a statement or reference to car clubs it is termed in reference to 'should do' rather than 'must do'. This detail of language makes a difference as to whether a planning policy or design code is followed. Developers, planning consultants and architects focus on policies that are requirements to gain planning approval. Implementation of a policy statement which is a 'should do' rather than a 'must do' varies and appears to depend largely on individual planners, transport officials and developer knowledge. Where car club policy is non-statutory it must compete against other priorities such as other infrastructure needs.

Reliance on Officers

7.7. There is some evidence to suggest that in the absence of statutory policy low car development and the inclusion of car clubs is largely led by individual officers on an opportunistic basis. For example, the Slateford Road housing development in Edinburgh is held as a pioneer of both car-free and car club development in the UK. Its creation and success, however, was largely as a result of individual enthusiasm within the local authority and housing association.

7.8. A local authority which promotes car clubs is currently largely reliant on officer knowledge, commitment which can be influenced by a range of pressures in planning and transport departments. An example of this is the City of Edinburgh Council which led the way in car club development in Scotland and has a dedicated policy in place since 2004. However, Fig. 4 gives a recent example of a potential missed opportunity

to expand Edinburgh's highly successful car club into a new development which matches the characteristics of supporting a car club.

Fig. 4

Boroughmuir High School, Edinburgh

This secondary school, located in Bruntsfield, south west of Edinburgh city centre is moving to a new site. An application to convert the building into 87 residential units was recommended for approval by planning officers in March 2017. Following substantial objections the application was, however, refused by City of Edinburgh Councillors.

The site has a long history of traffic congestion and parking stress problems, not confined to the operation of the school. The surrounding residential streets are a high density mix of terraced town houses and tenement flats with narrow road access. The neighbourhood is well served by public transport with ten bus routes every 10 – 20 minutes and a night bus. The area is criss-crossed by cycle routes and is 400 metres from National Cycle Route 754. Haymarket train station is 1.5km northwest of the site. A wide range of shops, restaurants, businesses and services are within walking and cycling distance.

The developer proposed to create 95 car parking spaces to serve the conversion – 68% of the maximum provision stated in the City of Edinburgh Council's parking standards policy.

The development is an opportunity to support a low car or car-free development to realise the considerable benefits evidenced in chapter 3.

Developer Contributions

7.9. Generally, developers consider including or funding car clubs only when required to by a planning authority and where this makes gaining planning permission more likely. Where a local authority judges that a new development will add to existing congestion and parking pressures, developers can see car clubs as a relatively low cost, deliverable part of a planning agreement to mitigate impacts. Car clubs offer a comparatively low cost form of planning gain, which can be delivered at the time of construction, especially if the local authority has clear tariffs or a proactive local car club seeking new bays.

7.10. Fig. 5, the example of Quartermile in Edinburgh illustrates the impact of specific car club and design policies which contain 'should do' rather than 'must do' statements and do not translate into successful creation of low car development. It also outlines the difficulty of relying on developer contributions (Section 75 agreements) to deliver sustainable travel infrastructure – no matter how low cost.

Fig. 5

Quartermile, Edinburgh

This large mixed use development one kilometre from Edinburgh city centre is on the site of the former Edinburgh Royal Infirmary and is due to be completed in 2018. As part of the development agreement, the local authority stated that a shared car scheme be negotiated between developers and the City Car Club. While initial discussions aimed for 20 spaces, 2 car club spaces were eventually agreed with phased funding to deliver future provision.

Ownership of this large development changed hands several times and it proved impossible to secure continued commitment to the car club from the new owners. Despite demand indicating more car club spaces are required, these have not been delivered. The developers are currently looking to sell the remainder of the car parking spaces and due to the narrow design of Edinburgh's streets, the council has reserved on street parking for short stay parking, leaving little room for car club parking.

Opportunity through Consultation

7.11. Organisations considering a new development or regeneration project – including statutory consultees such as community councils, the NHS and community planning partnerships and non-statutory groups such as civic trusts and voluntary organisations could prove to be strong advocates of raising the potential of including a car club at an early stage in the planning process. Increasing knowledge about car clubs and their benefits could be particularly useful in areas experiencing or at risk of traffic congestion and parking stress.

Summary of Promoting Low Car Neighbourhoods

7.12. **Car clubs are a relatively recent addition to the transport mix in Scotland's towns and cities. Moreover, as we have seen, provision for car clubs does not form part of statutory planning policy and adoption at local level is patchy. Promotion of car clubs and their benefits to consultees regularly involved in the planning process could significantly raise awareness of the benefits of car clubs and, in turn, their viability in new developments. This would help reduce reliance on individual local authority officers in the short term whilst more robust planning policy is delivered in the medium term.**

8. Low Car Neighbourhoods: Challenges and Opportunities

8.1. In 2016, the Scottish Government made a commitment to deliver 50,000 new homes over the current parliamentary term. Based on current trends, the majority will be delivered by the private sector, with housing associations and local authority delivering around 30% of new homes in Scotland. This provides considerable scope to promote low car neighbourhoods and car clubs. However, effective leadership is required at a national and local level to ensure housing is well planned and located and linked to other policy areas, including transport.[22]

8.2. Location, density and tenure type in most developments is shaped by market conditions – the type of housing that providers, both private and public, believe will sell or rent in a particular location. The effectiveness then of housing developments lies largely in the hands of developers who do not have the resources or incentive to challenge assumptions around viability.

8.3. There is evidence that developments which are walkable and well linked to local shops and services attract a premium.[23] However, this isn't currently reflected in the choice of location and design favoured by most developers – particularly for family homes. Fig. 6 touches on just some of the evidence related to proximity to green space and the effect living within walking distance to high quality green space has on reducing car use. Rarely is this reflected in spatial planning or sites identified in Local Development Plans. Attitudes to parking are similarly conservative and are not reflected in research. Developments often assess local authority maximum parking standards as a target to be met.

[22] Audit Scotland, Housing in Scotland, July 2013
[23] Yan Songa and Gerrit-Jan Knaap, New Urbanism and Housing Values, 2003

Fig. 6

Green Space & Car Use

Since 2003, The Commission for Architecture and the Built Environment in England has collected evidence that high quality green space in new developments increases walking, improves health and reduces social isolation and reduces car use. For example, they cite research that a six-fold increase in high quality public space in Copenhagen led to large increases in bicycle travel. They have also found that attractive green transport corridors reduce stress and encourage alternative means of travel and that homes adjacent to high quality green space are associated with increased house prices of around 5% -7%.

Hampshire County Council has also found that access to green space is a key factor in reducing car use – particularly for the 30% of households that own dogs. In 2013, it published Planning for Dog Walkers in New Developments which found that if greenspace cannot be accessed on foot from new housing, most dog owners will drive on a daily basis as opposed to taking fewer walks or being less inclined to keep a dog.

The planning advice states that routinely driving to dog walking areas from new housing works against a wide range of national and local government policies by increasing short journeys by car on a daily basis. It also states that dog owners' desire for walking their dogs off-lead, close to home and away from traffic once or twice a day, imposes specific requirements in terms of greenspace which should be considered in the design of new housing development.

Future Planning Policy

8.4. In a recent response to the Scottish Governments' review of the planning system. The RTPI in Scotland argues that the planning system should be frontloaded and proactive in supporting engagement and collaboration on priorities for an area. They state that planning should be recognised as a system to add value to a place – in particular taking the long view and enabling preventative spend.[24] This could support measures to promote low car neighbourhoods. For example, demanding that developers provide a much clearer picture on the lifestyles new developments are likely to support and

[24] RTPI Scotland, Repositioning Planning: Building a Successful and Sustainable Scotland, November 2016

using the place standard at the pre-planning stage. A focus on using national policies to make local planning simpler is an opportunity.

8.5. Where car clubs have expanded, developer contributions have been a factor (e.g. Edinburgh). However, responses to the Scottish Governments' review of the planning system noted that local authorities place an increasingly unviable reliance on developers to fund infrastructure improvements using these Section 75 contributions. In areas where there is relatively low market demand, planning authorities are unable to recoup infrastructure costs through developer contributions. Such agreements influence the viability of developments, particularly where the developer has paid a premium for a site, and further expenses cannot be recouped at the current market cost for the property. Car clubs therefore compete with contributions to other local priorities, including education and transport.

Summary of Challenges and Opportunities

8.6. **Clear policies and 'must do' statements, including tariffs, can help developers plan for and account for car club provision when purchasing sites. If car clubs were promoted as supporting higher densities this would also assist developers. Finding funds to support wider car club development will continue to prove challenging whilst local authorities rely on developer contributions (Section 75 agreements) to fund a range of infrastructure. Alternative methods of funding are being considered including, land tax or development taxes. It is important these account for the need to support car clubs and sustainable travel patterns for new developments. Changes to the planning system offer opportunities to make the pursuit of low car neighbourhoods more prominent, but care must be taken to upgrade and not lose key elements of supplementary guidance – particularly developer support for car clubs.**

9. Emerging Practice and Learning Opportunities

9.1. The eight developments in Appendix C have been identified as potential case studies for phase two of this review. The developments received planning approval after the publication of Designing Streets and all have a stated aim at masterplanning and/or application stage of creating walkable, sustainable communities.

9.2. They offer are an opportunity to test whether national planning policy - such as Designing Streets - and local authority planning is working together to deliver low car neighbourhoods.

Local Authority	Potential Case Study
Aberdeenshire Council	Chapeltown, Elsick
Fife Council	Fraser Avenue, Inverkeithing
City of Edinburgh Council	West Pilton Crescent
Glasgow City Council	Athletes' Village
West Lothian Council	Winchburgh Village
Glasgow City Council	Laurieston
Dundee City Council	Whitfield
Stirling Council	Huntly Crescent, Raploch

9.3. Of particular interest will be Scotland's contemporary generation of small new towns. These developments are a once in a lifetime opportunity to test sustainable planning policy against major new settlements. Chapelton, outlined in Appendix C, and Tornagrain, just outside Inverness, have been designed by the same masterplanner on the principles of new urbanism. In other countries, designing in walkability and active travel from the outset has reduced car ownership and short car trips. Will these new towns in Scotland attract a demographic who are more likely to not own a car and use active travel for their everyday needs? Or, do residents move in and find that they use the car less often – perhaps to the extent that they don't need private cars for their household? Here is an opportunity to find out what works – and what doesn't work – when translating sustainable design principles on a large scale.

9.4. Urban areas undergoing regeneration are also an opportunity to study emerging practice in the design and creation of low car neighbourhoods. West Pilton Crescent, set within the wider Pennywell and Muirhouse regeneration project, enjoys built in and well established connectivity – schools, employers and shops with regular, frequent buses, a nearby cycle path and a car club vehicle – all within walking distance from home. Here is an opportunity to study the impact of new design in an established community which seeks to improve permeability and make active travel a likely choice amongst people impacted most by the cost and inequalities of car ownership.

9.5. Fraser Avenue in Inverkeithing will be a test of using good design principles to reinvigorate and reconnect a residential street to the wider town. As with West Pilton Crescent, there is an opportunity to study residents' travel choices and whether they have changed in response to new design. The development also presents an opportunity to add car club travel into the available sustainable transport options.

9.6. Further investigation at the Athletes' Village in Glasgow would test planning policy against delivery and resident's actual travel behaviour in a development now served by two car club vehicles. This residential neighbourhood, within easy walking of Glasgow city centre, was designed around permeability, connectivity and access to sustainable travel. There is significant potential to study the travel choices of residents and identify key baseline opportunities and barriers in the creation of low car development.

Summary of Emerging Practice and Learning Opportunities

9.7. **The potential case studies identified in Appendix C offer an opportunity to evaluate emerging practice and provide an evidence base for more robust planning policy statements to be introduced to maximise the potential of low car developments.**

10. Conclusions & Recommendations

10.1. Private car dependency leads to health and environmental problems that are contrary to Scottish Government policy. Those living in areas of greater deprivation are more likely to be exposed to the harmful consequences of poor air quality and those living on lower incomes are more likely to live in high traffic areas and experience these impacts disproportionately.

10.2. National planning policies in Scotland are underpinned by clear ambitions to create well designed, walkable neighbourhoods which encourage residents to make active travel choices and support and encourage walking to local shops and facilities. Whilst all local authorities reference walking in their Local Development Plans, only a few have clear statements on car clubs and even then, both policies on active travel and car club provision are not applied robustly and consistently. These policies have been identified in Appendix B.

10.3. Local policies can make some claim to support low car orientated developments, including supporting car clubs, but rarely do statements translate into action. The key barrier appears to be that whilst sustainable travel is supported at local level, policy guidance is poorly framed using words such as 'should' rather than 'must'. Policies do not contain specific targets and the onus is on officers to find ways to influence the design.

10.4. This review found few examples where the principles set out in government policy have been delivered in full. The outcome at local level is that developers are required to only consider sustainable travel options rather than deliver critical aspects of location choice and design which make alternatives to the car viable. Where a commitment is negotiated using non statutory guidance, economic factors can cause problems. Ownership changes are especially problematic where agreements are non-transferrable or enforceable against third parties. Quartermile in Edinburgh (Fig. 5) is just one example where plans for car clubs agreed with a developer were not delivered in practice.

10.5. This mismatch between policy aspiration and on the ground delivery requires further study and the testing of planning policy against delivery if practice is to be improved. Eight developments across Scotland have been identified in Appendix C as offering the potential for further research and the testing of planning and transport policies against delivery. Understanding will only be enhanced by engaging residents, home buyers, developers and planners. Such engagement also offers opportunities to evaluate recently introduced planning tools such as the Place Standard and the Designing Streets toolkit.

10.6. Assumptions during the development and planning process related to housing density, location and parking standards are difficult to understand without focusing on specific developments. Many housing developments in Scotland are not progressing as quickly as needed, often due to economic uncertainty and factors out with developer control. This reinforces a conservative approach to design in the market and consumers are rarely given the option of car free or low car developments. It is interesting to note that Chapelton and Tornagrain, Scotland's new urbanism settlements, are led by the landowners rather than commercial housebuilders who face a different set of risks.

Without evidence that low car or even car free developments have a market housebuilders will not provide them.

10.7. Evidence shows that maximum parking standards - at least in the long run – can significantly reduce car use. The impact is particularly marked when workplace and parking charges are imposed. This indicates that reducing maximum standards and increasing parking charges can genuinely reduce reliance on the private car. Such measures, however, need to be supported by genuine alternatives - wider policies promoting active travel and behaviour change, good links to local services including access to car clubs. Failure to provide and promote a variety of alternatives leads to both real and perceived parking problems. These problems make it more difficult to gain support for future low car neighbourhood developments.

10.8. More effort is needed to promote the benefits of low car neighbourhoods, including car club provision. At present, the creation of low car neighbourhoods relies on general, non-statutory statements in planning policies and the knowledge and willingness of officers. Local authorities need legislation they can use to improve their capacity to negotiate with developers focused on clear outcomes for sustainable travel and modal share which includes car clubs. The ability to draw on more prominent national policies with statutory status and planning policy clarity at a local level offers opportunities.

10.9. It would also be helpful if consultees in the planning process - such as community councils, community planning partnerships, civic trusts and voluntary organisations – were better informed on the range of sustainable travel choices and could therefore advocate for low car neighbourhoods. Such organisations play a key role in the creation of new neighbourhoods and the revitalisation of sites and are consulted at increasingly early stages in the planning system. The Place Standard offers a tool to better consider transport issues alongside other factors – beyond a narrow focus on parking – and evaluating its use in the creation of new developments will be a priority.

10.10. Current practice relies on developer contributions to fund car clubs. Policies therefore need to be clear at the outset so developers can build in cost and design. A future tariff-based system offers a more consistent and transparent approach to funding car clubs.

10.11. Despite inconsistent policies and competing factors, low car developments do exist in Scotland and more are planned to be completed in the future. The story of how these developments were planned, designed and realised needs to be evaluated and understood to inform and develop future planning policy. Our future health and well-being relies on the provision of well designed, walkable neighbourhoods where sustainable travel needs are met. We have the opportunity in Scotland to increase our knowledge of what works where, in turn supporting developers, housebuilders and planners in delivering low car neighbourhoods.

11. Appendix A - National Policies

Scottish national planning policies recognise the importance of design-led and evidence based planning to reduce car dependency and promote active travel, including walkability. Statutory and non-statutory guidance and advice to Local Authorities and their partners is intended to support the overarching goals of sustainable economic growth and the transition to a low carbon economy.

The table below summarises the key areas of national policy and guidance most likely to impact on the creation of neighbourhoods which are less dependent on car ownership.

Policy Areas Affecting the Design of Neighbourhoods	**National Guidance**
Planning and developing new neighbourhoods	**The Town and Country Planning Act (Scotland) 1997**, amended in 2006, forms the basis of the planning system in Scotland. **Scottish Planning Policy (2014)** states that: "Planning should support development that is designed to a high-quality, which demonstrates the six qualities of successful place." The six qualities are: • Distinctive • Safe and pleasant • Welcoming • Adaptable • Resource efficient • Easy to move around and beyond. On the latter, the policy clarifies that: "This is development that considers place and the needs of people before the movement of motor vehicles. It could include using higher densities and a mix of uses that enhance accessibility by reducing reliance on private cars and prioritising sustainable and active travel choices, such as walking, cycling and public transport. It would include paths and routes which connect places directly and which are well-connected with the wider environment beyond the site boundary. This may include providing facilities that link different means of travel." (para. 46)

	The policy also states that: "New housing developments should be integrated with public transport and active travel networks such as footpaths and cycle routes.... New streets should connect well with existing streets and with walking and cycling networks." (para. 79) As a priority, "opportunities for walking and cycling should be planned into all new residential areas making urban areas more attractive and safer for pedestrians and cyclists." (para. 169) **The National Planning Framework 3 (2014)** is non-statutory guidance which sets out the Government's long term vision and context for planning. The Framework is taken into account in all strategic and local development plans in Scotland. The Planning Framework key outcomes for Scotland are: • A successful sustainable place – supporting economic growth, regeneration and the creation of well-designed places • **A low carbon place** – reducing our carbon emissions and adapting to climate change • **A natural resilient place** – helping to protect and enhance our natural cultural assets and facilitating their sustainable use • **A connected place** – supporting better transport and digital connectivity **Creating Places: A policy statement on architecture and place for Scotland (2013)** sets out the value of good design with an action plan to deliver positive change. The policy is clear on the value of designing for walkable, less car dependent neighbourhoods: **"**Sustainable places are often characterised by well-designed, walkable mixed-use neighbourhoods with integrated facilities… These types of places can play a role in reducing our carbon emissions and are a considerable impetus for healthier lifestyle choices. Our decision to make journeys on foot or by car is often determined by the layout of our surroundings." (pg. 18) **Planning Advice Notes (PANs)** provide advice on good practice. Some PANs contain good practice guidance which planning authorities and developers should carry out in their proposal development, assessment and delivery. Planning Delivery Advice: Housing and Infrastructure "Planning authorities should provide leadership by looking ahead to identify how development strategies can be future-proofed by anticipating and making provision for new and emerging technologies, particularly those which can contribute to lower carbon living." (pg. 19) **Circular 6/2013 'Development Planning'** states that "items for which financial or other contributions, including affordable housing, will be sought and the circumstances (locations, types of development) where they will be sought" should be identified in the plan, rather than supplementary guidance. The strategic/local development plan is the primary planning document for the identification of the infrastructure needed to deliver the plan.

	Planning conditions are generally preferable to a planning or legal obligation. The guidance contained in Circular 4/1998: The Use of Conditions in Planning Permissions should be followed. **Circular 3/2012: Planning Obligations and Good Neighbour Agreements** sets out Scottish Government policy and guidance on the circumstances in which Section 75 planning obligations can be used. Regardless of the mechanism to be used, the case for developer contributions should be established wherever possible through the strategic development plan/local development plan. "…Transport infrastructure and services needed to support development should be considered from the start of the plan process, as these are required to inform the delivery of spatial strategies. Transport impacts can often be identified relatively late in the process, thereby undermining the deliverability of sites within the plan. It is recommended that, along with other interests, transport infrastructure providers are actively engaged early and throughout the development planning process. Planning authorities should work with all those with an interest in transport infrastructure and service provider stakeholders to identify, assess and monitor progress on delivery of sites." (pg. 29) **PAN 83: Masterplanning** "A masterplan should genuinely raise the standards of development, not simply aim to ease a proposal through the planning system. It will carry more weight in the system if it is consistent with national planning guidance and local planning policy, has been prepared with effective public participation, and has been formally adopted by the local planning authority." (pg. 20) The following questions can be applied to any masterplan to assess whether it will meet the six qualities of Designing Places: • Will the development provide (or be close to) community facilities, such as a school, park, play areas, shops, pubs or cafes? • Will the development have active frontages to streets? • Will all routes and public spaces be overlooked (pg.22) • Will areas with the highest densities be located where access to public transport is best? • Will public transport facilities be well-connected and safe? • Will public spaces, roads and footpaths be connected into well-used routes? • Will there be provision for and promotion of a range of transport options? • Will the building layout take priority over the roads and car parking, so that highways do not dominate? • Will the streets be pedestrian, cycle and vehicle-friendly? • Will car parking be well-integrated into the street scene? • Will the scheme integrate with existing roads, paths and surrounding development?

	• Will public spaces and pedestrian routes be overlooked and feel safe? • Will the development have easy access to public transport? **PAN 44: Fitting New Housing Development into the Landscape** This guidance sets out approaches to new housing development layout and promotes new development which relates to its surrounding landscape. "Recent housing developments on the edge of towns and cities in Scotland are derived primarily, from suburban principles of site planning and layout. Transportation and access are major determinants of urban form. Narrow streets and compact development contrast with the demanding requirements of the motor car." (pg.3) And in considering the characteristics of recent development: "The car has become dominant, demanding space for access, garaging and parking. Streets which once formed attractive townscapes, unifying buildings and providing the setting for numerous activities are now overwhelmed by traffic, keeping either side apart functionally and visually. The consequences of traffic congestion includes visual intrusion, danger and noise." (pg. 4) **PAN 59: Improving Town Centres** Whilst PAN 59 considers access for the car it does acknowledge the problems of car orientated town centres: "…Travel and transportation problems have clearly had a major impact on the vitality and viability of some centres." (pg. 6) And "The presence of large volumes of vehicles does not make for safe and pleasant town centres." (pg. 7) "Generally this will mean giving priority to integrated public transport systems, cycling and pedestrian networks rather than private cars; implementing traffic calming measures; providing good public transport access, including the provision of park and ride facilities; providing access and secure facilities for cyclists; and giving the pedestrian priority over the car within the core." (pg. 25) **PAN 72: Housing in the Countryside** PAN 72 notes that there has been a rise in the number of people wishing to live in the countryside while working in towns and cities within commuting distance and that housing development in rural areas has suffered from an over reliance on houses not designed specifically for the site and road engineers using urban solutions. **PAN 51: Planning, Environmental Protection and Regulation** "It may be necessary to consider whether a development could lead to the designation of a new AQMA or if granting planning permission could conflict with an Air Quality Action Plan." (pg. 4) Noise and nuisance are also material planning conditions which may require mitigating actions:

	"New noise or nuisance sensitive developments have to be carefully considered in relation to existing noise or nuisance emitting land uses, for example, social housing adjacent to busy roads…" (pg. 4) Additional guidance is set out in **PAN 1/2011 Planning and Noise** **PAN 75: Planning for Transport** Both SPP 17 and PAN 75 support the development of networks of paths, trails and green spaces that encourage walking, cycling and riding and link urban areas with the surrounding countryside and jobs to homes. "The intention is for new developments to be user focused and for the transport element to promote genuine choice, so that each mode contributes its full potential and people can move easily between different modes." (pg.1) PAN 75 clarifies that Local Transport Strategies (LTSs) are not statutory, but all local authorities have chosen to produce one. They set out the local authority's objectives, strategies and implementation plans for transport in their area. "Development plan policy should encourage development of significant travel generating proposals at locations which are key nodes on the public transport network that have a potential for higher density development and a potential for mixed use development with an emphasis on high quality design and innovation. These locations should encourage modal shift of people and freight by providing good linkages to rail, walking and cycling networks and with vehicular considerations, including parking, having a less significant role." (pg. 5) "Parking policies should support the overall locational policies in the development plan. The availability of parking, for both cars and cycles, influences the choice of transport. Parking policies must be handled sensitively and adapted to particular local circumstances, for example through the development of a local authority's own maximum and optional underpinning minimum parking standards." (pg. 6) The PAN outlines measures that can influence parking and includes two relevant to car clubs: • Encouragement of car-sharing by using a database and preferential parking spaces • Establishment of car sharing or a car pool It also places an emphasis on localised planning, design and solutions: "It is recommended that the appropriate use of travel plans should be determined by considering the potential contribution a development can make to sustainable travel. All applications meeting the threshold for a transport assessment should require a travel plan; developments below the threshold may nevertheless contribute to sustainable travel. As planning applications can be submitted as detailed or in outline it is recommended that travel plans should also follow a two stage process. A travel plan framework should be agreed at the planning application stage." (pg. 10)

	"Where the occupier is speculative or unknown the planning conditions which would be associated with the travel plan should include physical/infrastructure facilities to encourage walking and cycling, for example adequate storage provision, showering facilities, links to wider walking and cycling networks and possible provision of additional public transport facilities." (pg.10) "Where the occupier is known measures should be more robust. The travel plan should incorporate a variety of measures and targets to encourage sustainable travel, such as MSTs, an implementation time scale and an agreed monitoring and review process." (pg.10) "Walking is the most sustainable mode and requires relatively little investment to make it attractive, particularly if planned and designed into a new development from the outset. Planning can encourage walking to become the prime mode for shorter journeys through arranging land uses, by utilising urban design and encouraging specific schemes." (pg.15)
Designing and managing local streets in residential neighbourhoods	**Designing Streets: A policy statement for Scotland (2010)** is design-led guidance which alongside **Creating Places** are the key policy statements on design and place making in Scotland. "The need to cater for motor vehicles is well understood by designers, but the passage of people on foot and cycle has often been neglected. Walking and cycling are important modes of travel, offering a more sustainable alternative to the car, making a positive contribution to the overall character of a place, public health, social interaction and to tackling climate change through reductions in carbon emissions." (pg. 8) In the street design hierarchy, pedestrians, cyclists, walkable neighbourhoods, shared spaces and good connectivity are placed at the top. "Street user hierarchy should consider pedestrians first and private motor vehicles last… Public transport planning should be considered at an early stage in the design process." (pg. 12) "Density is also an important consideration in reducing reliance on the private car." (pg.27) **PAN 52: Planning in Small Towns** This guidance provides a good summary of the problems caused by car orientated developments in small towns: "Solutions to congestion and conflicts between vehicles and pedestrians have often involved major road building and the creation of large car parks, which have sometimes been disproportionate to the scale of the problem, severed important linkages and obliterated historic street and land use patterns. Moreover, well-intentioned 'streetscape improvement' has often removed important features and introduced alien materials and colour while lack of attention to the amount, design and positioning of new street furniture has introduced clutter and a sense of artificiality into pleasing urban spaces." (pg. 7) "In small towns there is considerable scope to encourage means of transport other than private cars. The improvement of local environmental conditions by managing traffic includes reducing or removing through traffic, slowing it down in places where it creates a hazard, improving road safety and amenity through traffic calming and giving priority to those who walk and cycle. In

	addition, therefore, to supporting the local economy, transport can be organised to reduce the number of short car trips, alleviate stress, encourage a more healthy life style, support community safety, reduce pollution and contribute to a greater appreciation of a town and its setting." (pg.23) PAN 56: Planning and Open Space "New areas of open space of enduring quality and value have, however, been the exception rather than the rule and existing spaces are under pressure…" (pg. 1) **PAN 77: Designing Safer Places** PAN 77 states that pedestrian areas and car parking should be designed with good natural surveillance. PAN 78: Inclusive Design "Even where inclusive design has been considered, it is often specific to the building and does not include links with the surrounding public spaces and wider built environment. As a result, accessible buildings are sometimes located in inaccessible places." (pg. 7) **Cycling By Design 2010** aims to ensure consistency across Scotland's cycle routes and provides guidance on cycle paths. It also includes guidance for walkers and on access for disabled people and integrated transport solutions.
Active Travel Policy	Scottish Government policy in recent years has placed increased emphasis on the promotion of active travel. Three main policy documents shape the national vision on active travel, walking and cycling. **A Long-Term Vision for Active Travel in Scotland 2030** aims to encourage more people to walk and cycle for everyday shorter journeys. The Vision includes a built environment that puts people and place before the movement of vehicles. Active travel is integrated with a public transport system which supports car club provision. "Car clubs, car hire and other forms of shared provision are common choices, facilitated by continuing advances in mobile technology and intelligent cars. This allows people to choose the most appropriate vehicle for any non-active travel trip." (pg. 11) "All new developments follow design guidance such as Designing Streets, putting people and place before vehicle movement. There is increased use of Section 75 and planning conditions to deliver funding and facilities for active travel." (pg. 13) **The Review of Active Travel Policy Implantation 2016** found that delivery is patchy across Scotland and that direct control over active travel outcomes rests with local authorities and other local agencies. "Every active travel success story has depended on effective partnership working between organisations. Local interest and capacity is essential to generate effective community-led schemes; this is not consistently available, but can be encouraged and developed by intelligent public sector support and investment."(pg.6) It concludes that

	• Institutional and political structures can then hamper delivery, as cooperation within and between organisations is challenging to create and maintain. • Non-delivery of schemes to facilitate active travel to major developments is still a big problem; planning decisions are weakened by the lack of a single consultee representing active travel issues. • There is a gap between development control and development management – planners don't deliver developments. • There is a need for stronger advocacy for effective active travel elements (infrastructure, promotion, etc.) alongside significant developments or transport schemes • Opportunities of travel planning are often missed, largely through a lack of planning, and genuine prioritisation of the mode hierarchy (walking, cycling, public transport, private vehicle), are lacking, as well as ineffective implementation at development management stages. **The National Walking Strategy 2014** aims to create a culture of everyday walking, enable safe independent mobility for everyone and create better quality walking environments. "By developing and managing attractive, well designed places and signed routes close to where people live and work, we will encourage people to use them on a regular basis for health, recreation, sport and active travel." (pg. 8) **The Cycling Action Plan for Scotland 2017 – 2020** is an outcomes focused policy document which builds on an earlier Action Plan to achieve 10% of all journeys to be made by bike by 2020. Actions are specific and measurable and include the expansion of 20mph zones as well as policies to improve the design of streets and neighbourhoods. Continue to promote a national training programme on cycling-integration design and best practice to planners, designers and engineers.
Single Outcome Agreements	At the strategic and local level, planning makes a very important contribution to the delivery of **Single Outcome Agreements** (SOAs), through their shared focus on 'place'. Effective integration between land use planning and community planning is crucial and development plans should reflect close working with Community Planning Partnerships.
Community Planning Partnerships	Each local authority area has a **Community Planning Partnership (CPP).** CPPs are comprised of representatives from local public services e.g. the NHS, Fire and Police Services and local Council with a remit to work with communities to plan and deliver better services. Under **Part 2 Community Planning, of the Community Empowerment (Scotland) Act 2015** CPPs are responsible for producing a Local Outcomes Improvement Plan which covers the entire local authority area and a Locality Plan which covers an area within the CPP. CPPs play an important role in the promotion and delivery of active travel in Scotland's neighbourhoods. Their role is highlighted in A Long-Term Vision for Active Travel in Scotland 2030:

	"Community Planning Partnerships and all partners recognise the preventative benefits of active travel by prioritising investment in walking and cycling as a means of achieving key national and local social, environmental and economic outcomes related to improving health and wellbeing, reducing carbon footprints and supporting sustainable economic growth." (pg. 13) "Communities are involved in the development, management and promotion of active travel networks and interventions in their area using the skills, knowledge and capacity in the community." (pg. 12)
Community Safety	**Community Safety Partnerships (CSPs)** bring together representatives from the Local Authority, police service and other relevant agencies to reduce anti-social behaviour, fear of crime and to promote safer, more inclusive and healthier communities. "Secured by Design, a UK police initiative to help create safer, more secure environments proposes core principles of: environmental quality and sense of ownership; natural surveillance; access and footpaths; lighting and open space provision, lighting etc. all of which can be applied to spaces which are walkable." (page 14)
Public Health	**Good Places, Better Health (2008)** was a policy and framework response to the challenge to create safe and positive environments which nurture better and more equal health and wellbeing. **Good Places** recognises that to deliver on the Government's purpose, themes, and national outcomes there is a need for greater connections around how physical environment influences health. The policy is underpinned by an objective to ensure greater connections between the built environment and health policy and actions. **The Smarter Choices, Smarter Places (SCSP)** is a policy initiative to encourage more people to reduce private car use. The initiative supports key active travel policies and promotes infrastructure designed around walking, cycling, shared car use and public transport as well as behaviour change to encourage modal shift.
Equality of Opportunity	**Planning Advice Note 81 (2007)** on community engagement, describes different types of "communities" and offers advice and information to help ensure that everyone, no matter their age, gender or cultural background can participate in ways that suit them in the planning decisions that affect their environment. **The National Standards on Community Engagement 2015/16** are good-practice principles designed to support and inform community engagement, including consultation during planning and design processes. **The Community Empowerment (Scotland) Act 2015** has a specific focus on promoting effective engagement and participation to help communities achieve greater control and influence in the decisions and circumstances that affect their lives. **The Good Practice Guide for Roads 2013** provides requirements for inclusive design in the construction, operation and maintenance of road infrastructure. It outlines international good practice and advice on providing for the needs of people with sensory, cognitive and physical impairments within the road environment.

12. Appendix B - Local Development Plans

Local Development Plans (LDPs) are statutory planning policies which provide the vision for how communities will develop in the future. They set out locations for new homes and businesses and describe how facilities will be provided. The Planning etc. (Scotland) Act 2006 requires all Councils to review the LDP every five years. Where a LDP is under review this is noted in the table.

Local authorities also prepare supplementary planning guidance. However, the Scottish Government stated in 2013 that supplementary guidance is limited to the provision of further information or detail and that the local development plan must identify the matters covered in supplementary guidance. Supplementary planning guidance may therefore be non-statutory in some cases.

The Red, Amber and Green ratings are based on the policies provided within adopted LDPs. Where insufficient public information is available, a red marking has been allocated.

Local Authority Area	**LDP Policies promoting walking in new developments**	**Support for Car Clubs in LDP**	**Sites with potential to design for active travel**
Aberdeen City Council 2017	**Policy T2 - Managing the Transport Impact of Development** "New developments must demonstrate that sufficient measures have been taken to minimise traffic generated and to maximise opportunities for sustainable and active travel." (pg. 49) **Policy T3 - Sustainable and Active Travel** "New developments must be accessible by a range of transport modes, with an emphasis on active and sustainable transport, and the internal layout of developments must prioritise walking, cycling and public transport." And "Street layouts will reflect the principles of Designing Streets and meet the minimum distances to services as set out in the Supplementary Guidance." (pg.39)	Yes "Recognising that there will still be instances in which people will require to travel by car, initiatives such as like car sharing, alternative fuel vehicles and Car Clubs will also be supported where appropriate." (pg.49) Photo of car club vehicle and charging point in LDP Supplementary guidance within the plan on	Dyce/Bucksburn A96 corridor Maidencraig Greenferns Countesswells Friarsfield, Loirston

		developer contributions for infrastructure, including transport.	
Aberdeenshire Council* 2012	**SG BUS2 – Office Development** Approve new development if: "the applicant demonstrates that the development will be adequately accessible by public transport where available, or by walking or other non-motorised means of travel, or would deliver improvements to public transport services in scale with the development." (pg.2) Supplementary guidance contains statements on walking and active travel.	No statement Policy on developer contributions in LDP	Chapelton (new town) Inverurie Port Elphinstone
Angus Council 2016	**Policy DS2 Accessible Development** "Provide and/or enhance safe and pleasant paths for walking and cycling which are suitable for use by all, and link existing and proposed path networks; and are located where there is adequate local road network capacity or where capacity can be made available." (pg. 11) Guidance on Design Quality and Placemaking (out for consultation)	No statement Statutory supplementary guidance on developer contributions	Abbey Quarter Viewmont, Forfar
Argyll and Bute Council 2015	**Policy LDP Srat 1 – Sustainable Development** For new development proposals should: "Utilise public transport corridors and active travel networks." (pg.7) **Policy LDP 11 – Improving our Connectivity and Infrastructure** Development will be supported where: "the proposed development is accessible by a range of modes of transport, including walking, cycling, public transport and car." and "maximum and minimum car parking standards are applied" (pg.58) "Locations that are accessible by walking, cycling and public transport and that make best use of or add to existing networks are those that can contribute most positively to the sustainable development of the area." (pg.59)	No statement	Helensburgh Golf Club (phase 2) Spence Court, Dunoon Dunbeg (phase 3)

Clackmannanshire Council 2015	"The LDP seeks to promote a pattern of development that reduces the need to travel, provides safe and convenient opportunities to make more journeys by walking and cycling, facilitates travel by public transport." And [Proposals for new development] "will include layout patterns that favour and encourage walking and cycling, enable penetration of bus services where appropriate, and minimise conflict between vehicles, pedestrians and cyclists." (pg.45) **Policy SC12 - Development Proposals - Access and Transport Requirements** "capable of being safely and conveniently accessed by a choice of travel modes including walking, cycling and public transport as well as by motor vehicles and designed to reduce travel demands" (pg. 51)	No statement	Forestmill Alloa Sauchie
Dumfries and Galloway Council* 2014	"The spatial strategy supports a pattern of development which reduces the need to travel, facilitates travel by public transport and freight movement by rail or water, and provides safe and convenient opportunities for walking and cycling. The Plan expects good quality development that builds in sustainable transport modes at the beginning of the design process." (pg. 21) **Policy OP1: Development Considerations** "Development proposals should minimise the need for travel by car and encourage active and other more sustainable forms of travel whilst avoiding or mitigating any adverse impact on the transport network or road safety." (pg.25) **Retailing and Town Centres** "New neighbourhood centres will be encouraged where they are of a scale to serve a large new development and are accessible by foot and bicycle." And "Small shops in local centres and villages play an important social and economic role especially to those who do not have access to private transport. Where a settlement does not have a shop, or the facility has	No statement	Riverside Park, Canombie West of Torres Road, Castle Douglas Barnhill, Dumfries

	been lost the Council will encourage development or replacement of the retail use." (pg. 31) **Policy ED9: Neighbourhood Centres, Small and Rural Shops** "The Council will support small-scale (maximum 500 sq. gross floorspace) supermarket or convenience store developments that serve the needs of an existing neighbourhood or new residential / employment / mixed use sites which are within a walk-in catchment of the proposed development, and are in a highly accessible location for walking and cycling." (pg.34) **Access** "New housing developments should be integrated with public transport and active travel networks, such as paths and cycle routes, rather than encouraging dependence on the car. New streets should connect well with existing streets and with walking and cycling networks, and allow for links into future areas of development." (Pg.75) **Policy T2: Location of Development / Accessibility** All developments will be expected to: "prioritise personal travel by mode in the following order: walking, cycling, public transport and lastly car and other motorised vehicles." And "be well served by the most sustainable modes of travel available and provide opportunities for a modal shift from private car use to more sustainable transport, including active travel, wherever possible." (pg.94)		
Dundee City Council* 2014	"new housing developments should be integrated with public transport and active travel networks, such as footpaths and cycle routes, rather than encouraging dependence on the car. New streets should connect well with existing streets and with walking and cycling networks and link into and develop the green infrastructure network across the City." (pg. 26)	Appendix 3: Design of New Housing **Car Parking Standard**: "100% car parking provision for new build properties. Flexibility on the level of provision may be applied where car free	Whitfield Western Gateway Waterfront (Dundee Port)

	Policy 54: Active Travel "New development should be designed in order to: 1) minimise the need to travel by private car, 2) improve access to services, and 3) promote healthy lifestyles by encouraging active travel" (pg. 65) **Policy 55: Accessibility of New Developments** "development proposals that generate travel should be designed to be well served by all modes of transport. In particular the sustainable modes of walking, cycling and public transport should be afforded priority and allow walkable access to local amenities." (pg. 66)	schemes or alternative arrangements such as car clubs are proposed or where provision is impractical." (pg. 74) Supplementary guidance on developer contributions.	
East Ayrshire Council* 2017 (status unclear)	**Spatial Strategy** "Directing development to accessible locations to reduce the overall need to travel. Where travel is necessary, locations accessible by a variety of modes of public transport as well as walking and cycling are prioritised." (pg. 7) **Policy T1: Transportation requirements for new development** **"**All new development will require to fully embrace active travel by incorporating new, and providing links to existing footpaths, cycle routes and public transport routes. Developments which maximise the extent to which travel demands are met first through walking, then cycling, then public transport and finally through the use of private cars will be particularly supported." (pg. 78) **Policy T2: Transport Requirements for New Significant Traffic Generating Uses** "The Council will not support new significant travel generating uses at locations which would increase reliance on the car and where: (i) Direct links to local facilities via walking and cycling networks are not available or cannot be made available;(ii) Access to local facilities via public transport networks would involve walking more than 400m" (pg. 79)	No statement Statement on developer contributions in LDP	Stewarton

East Dunbartonshire Council 2017	**Policy 4. Sustainable Transport** "New developments require to be well served by frequent and accessible public transport services, and walking and cycling infrastructure to ensure that a range of sustainable, practical and healthy travel options are enjoyed." "Development proposals for significant travel generating uses will not be supported in locations where: A. There are no immediate links to walking or cycle networks or where links cannot be easily delivered, or; B. There is no access to public transport within a 400m walk via well-lit, safe and all-weather routes that have been designed for all users, or C. There would be clear reliance on access by private car."	No statement Supplementary Guidance on Green Infrastructure and Green Network. Supplementary guidance on Developer Contributions	Birdston Road, Milton of Campsie Douglaston Golf Course, Milgnavie Crosshill Road, Lenzie
East Lothian Council 2016 (not yet adopted)	"Promoting local services and new development alongside sustainable transport options will help maximise accessibility and social inclusion. In areas of significant change, or in the design of sites, the Council will ensure that digital networks can be provided and that the order of travel priority can be walking, cycling, public transport then private cars where possible." (pg.88) **Location of New Development:** The Council will seek to: "Introduce or contribute to traffic management and restraint measures which favour public transport, walking and cycling where appropriate." (pg.88) **Policy T2 : General Transport Impact** "New development must have no significant adverse impact on: Road safety; The convenience, safety and attractiveness of walking and cycling in the surrounding area; Public transport operations in the surrounding area, both existing and planned, including convenience of access to these and their travel times; The capacity of the surrounding road network to deal with traffic unrelated to the proposed development; and Residential amenity as a consequence of an increase in motorised traffic." (pg. 90)	No statement Developer Contributions Supplementary Guidance	Blindwells, Tranent

	PROP T3: Segregated Active Travel Corridor "The Council will develop a new segregated active travel corridor within East Lothian and will work in partnership with local communities, public, developers and the private sector to secure funding mechanisms." (pg. 90) **Policy T6: Reallocation of Road Space and Pedestrian Crossing Points** "The Council shall explore opportunities to reallocate road space to pedestrians and cyclists where this can be achieved without significant adverse impacts on the efficiency of the road network. The Council shall also review existing pedestrian crossings points to ensure that desire lines are being catered for and new crossing locations shall be introduced as necessary. New development proposals will be expected to adhere to these principles in their design and layout, and developers will be expected delivery of such measures as part of their development design." (pg. 91)		
East Renfrewshire Council* 2015	**Policy D1: Detailed Guidance for all Development** "Development should enhance the opportunity for and access to sustainable transportation, including provision for bus infrastructure and particularly walking and cycle opportunities." (pg. 42) **Community, Leisure and Educational Facilities** **"…**ensure new facilities are in locations accessible by walking, cycling and public transport." (pg. 51) "Opportunities for increasing connectivity by use of public transport, and by walking and cycling will continue to be promoted. New and improved footpaths and cycleways will be provided in conjunction with proposed development. Designing Places and Designing Streets should be reflected in all new proposals with pedestrians and cyclists given priority within developments." (pg. 67)	No statement	Malletsheugh/ Maidenhill Glasgow Road/Shanks Park Springhill, Springfield, Lyoncross Barrhead South

	Policy SG10: Sustainable Transport Network "Opportunities for improving the walking and cycling network, public transport and the health benefits of proposals will be key components of the master plans." (pg. 68) "Ensure new development is designed to prioritise accessibility, safety and sustainable modes of travel through a choice of walking, cycling and public transport. Ensure walking and cycling enhancements by improving community links and utilising and maximising the existing networks and ensure that opportunities to promote walking and cycling along linear routes are not lost." (pg. 68)		
Edinburgh City Council 2016	"Reducing the need to travel and promoting use of sustainable modes of transport are key principles underlying the LDP strategy" and an "improved transport system based on sustainable alternatives to the car is a high priority for Edinburgh." (para 84, pg. 35) The LDP encourages higher densities in accessible locations and mixed use developments. Attention on the design or development and to the supply and quality of car and cycle parking. The LDP also includes safeguards for a number of public transport improvements, footpaths and cycleways. (pg. 36) **Policy Des 7 Layout Design (pg.96)** "*the layout will encourage walking and cycling, cater for the requirements of public transport if required and incorporate design features which will restrict traffic speeds to an appropriate level and minimise potential conflict between pedestrians, cyclists and motorised traffic* " **Policy Ret 4 Commercial Centres (pg. 121)** "*The proposal will assist in making the centre more accessible by public transport, walking and cycling, contribute to less car travel, and will improve the appearance and environment of the centre*."	**Part 2 Section 7 Transport Policy Tra 2 Private Car** Parking (pg. 127) states planning permission will be granted for development which complies with the parking levels in Council guidance. (f) whether complementary measures can be put in place to make it more convenient for residents not to own a car, for example car sharing or pooling arrangements, including access to the city's car club scheme.	Waterfront (mixed use regeneration) West Edinburgh South East (housing)

	Policy Tra 1 Location of Major Travel Generating Development (pg. 126) "*In general, applicants should demonstrate that the location proposed is suitable with regard to access by walking, cycling and public transport and that measures will be taken to mitigate any adverse effects on networks and bring accessibility by and use of non-car modes up to acceptable levels if necessary*." Detailed supplementary guidance on street design.		
Falkirk Council* 2015	**Policy HSG03 Windfall Housing** Development will be supported where: "The site enjoys good accessibility by public transport, walking and cycling to shopping, recreational and other community facilities." (pg. 43) **Policy INF07 Walking and Cycling** "New development will be required to provide an appropriate standard of pedestrian and cycle infrastructure. Pedestrian and cycle facilities in new developments should offer appropriate links to existing networks in surrounding areas, in particular to facilitate school journeys and provide connections to public transport, as well as links to other amenities and community facilities. The surfacing, lighting, design, maintenance and location of pedestrian and cycle routes should promote their safe use. Particular emphasis should be given to the provision of suitable lighting, and the provision of suitably designed and located crossing facilities…" (pg. 49) **Policy INF08 Bus Travel and New Development** "New development will be required to provide appropriate levels of bus infrastructure or suitable links to existing bus stops or services, as identified within travel plans, taking account of the 400m maximum walking distance required by SPP." (pg. 50)	No statement	Denny (south east)

	Policy INF11 Parking "The Council will manage parking provision as an integral part of wider transport planning policy to ensure that road traffic reduction, public transport, walking, cycling and safety objectives are met." (pg. 52) Detailed Supplementary Guidance on Neighbourhood Design with a focus on delivering Designing Streets.		
Fife Council* 2017 (not yet adopted)	**Policy 3 - Infrastructure and Services** "local transport and safe access routes which link with existing networks, including for walking and cycling, utilising the guidance in Making Fife's Places Supplementary Guidance." (pg. 417) **Policy 11: Low Carbon** "All development should encourage and facilitate the use of sustainable transport appropriate to the development, promoting in the following order of priority: walking, cycling, public transport, cars." (pg. 456) Creation/enhancement of walking routes in identified areas of development. **Making Fife's Places** Supplementary Guidance consultation March 2017 – document contains detailed design guidance.	No statement Consultation on supplementary guidance for developer contributions.	North Crail Kelty South West North Dunfermline
Glasgow City Council 2017	**Active Travel** "The Council will require new developments to be designed to promote and facilitate walking and cycling, including the provision of cycle parking and direct connections to the walking and cycling network." (pg. 112) **CDP 11: Sustainable Transport** Supplementary guidance on: the provision and design of parking for vehicles, including the charging of electric vehicles, in new Development car free housing promoting active travel in new developments development and design of new walking and cycling routes guiding		Maryhil Locks Ronaldsay Street/ Liddesdale Square Govan Graving Docks, Govan Road Aberdalgie Road (South Blairtummock) Cowlairs/ East Keppoch Ruchill Hospital/ Bilsland Drive Custom House Quay Gardens

	developments to locations which are accessible by public transport and active travel.		Clyde Place/Kingston Street (West) Laurieston Bellgrove Street/Duke Street/Melbourne Street Dlamarnock Baillieston, Broomhouse & Carmyle
Highland Council* 2012 (Highland-wide development plan)	By 2030: "the area will have seen substantial improvements to the existing transport network through improvements to the road network, seeing an increase in the numbers of people walking, cycling as a result of the green network, and taking the urban rail/bus networks." (pg.21) **Policy 28 Sustainable Design** "Proposed developments will be assessed on the extent to which they: are accessible by public transport, cycling and walking as well as car." (pg.77) **Policy 56 Travel** Development should: "be well served by the most sustainable modes of travel available in the locality from the outset, providing opportunity for modal shift from private car to more sustainable transport modes wherever possible." (pg. 107)	No statement	Tornagrain (new town) Beauly, Ardersier, Drumnadrochit and Fort Augustus in Inverness Dingwall Aviemore Portree, Skye
Inverclyde Council 2014	**Policy SDS2 -Integration of Land Use and Sustainable Transport** "The integration of land use and sustainable transport will be promoted through safeguarding and enhancing the network of sustainable forms of transport - walking and cycling, public transport, rail, park and ride and sea-borne traffic." (pg.10) **Transport and Connectivity** "regional and local transport priorities are implemented in Inverclyde through the Inverclyde Local Transport Strategy (LTS) 2009-2014, which aims to extend and diversify transport infrastructure, particularly for	No statement	Barrhead (former Shanks site)

	walking, cycling and public transport, and to provide better integration between modes." (pg.31) **Sustainable Access** "Personal travel should be prioritised by walking, cycling, and public transport, then by car and other motorised vehicles." (pg.34) Supplementary Planning Guidance on the Green Network.		
Midlothian Council* 2008 (2016 plan with reporter)	Revised references to commitments in the Edinburgh and Lothians Structure Plan 2015 to walking, cycling and public transport provision in new development. Specific walking/cycle plan routes for existing developments.	No statement	A7/A68 Waverley Line Corridor (Dalkeith, Mayfield, Newtongrange) Loahead/Straiton Penicuik
Moray Council 2015	**PP3 Placemaking** "All developments must incorporate the key principles of Designing Streets, Creating Places and the Councils Supplementary Guidance on Urban Design. Developments should be: Well connected, walkable neighbourhoods which are easy to move around and designed to encourage social interaction and healthier lifestyles." (pg. 9) **Policy T2 Provision of Access** "Proposals must maximise connections for pedestrians and cyclists, including links to active travel and core paths routes, to reduce travel demands…" (pg. 70) "Significant transport generating proposals will only be supported where: direct links to walking and cycling networks are available." (pg.71) The LDP also has a specific policy on safeguarding and promoting walking, cycling and horse riding routes (pg. 74) Supplementary Guidance: People and Places a Design Guide for Moray	No statement	

Comhairle nan Eilean Siar (Western Isles Council)* 2012	**Policy 26: Transport Infrastructure** "New development will be required to: where possible accommodate cyclists and pedestrians and secure improved road safety related to the proposal, in particular around schools, community or leisure facilities." (pg. 52) Policy on car parking in supplementary guidance.	No statement	Melbost Farm East, Stornaway
North Ayrshire Council* 2014	**Policy PI 1 Walking, Cycling & Public Transport** "requires development proposals with significant trip generation to take account of and provide for these forms of travel" (pg. 70) and proposals must reflect Designing Streets. **Policy PI10: Community Infrastructure** Developments must: "…demonstrates a high level of accessibility, particularly for walking, cycling and public transport." And "In the case of residential, nursing and other social care facilities, proposals should be located within reasonable walking distance of local services." (pg. 78) **Neighbourhood Design Guidance** is also published which provides detailed guidance on street design and parking.	No statement	Bourtreehill, Irvine
North Lanarkshire Council* 2012	**DSP2 Location of Development** All development must: "support the hierarchy of walking/cycling/public transport/private transport" (pg. 27) **DSP4 Quality of Development** "address convenient access into and through the development that is attractive to pedestrians, cyclists, and people with disabilities; integration with public transport, green networks and wider links; access for cars, where required, being safe for all road users, and appropriate parking or traffic calming being well located and integrated." (pg. 28) Supplementary Planning Guidance on Travel Plans.	No statement	Gartosh and Glenboig South Cumbernauld
	Policy SD1 criteria for All New Development	No statement	

Orkney Islands Council 2016	Development will be supported: "where possible, shapes development patterns in a way which can reduce the need to travel, especially by car, and increases the attractiveness of walking, cycling and public transport." (pg. 11) "The Council is committed to reducing car dependency through its proposals within the Plan, and reducing current levels of emissions by supporting a range of measures through the Sustainable Transport Strategy. This will include, for example, facilitating the installation of infrastructure within the settlements to support new technologies, such as charging points for electric vehicles." (pg.12) **Policy SD2Transport and Travel** "be well served by the most sustainable modes of travel available in the locality and provide opportunities for a modal shift from private car use to more sustainable transport, including active travel, wherever possible." And "connect into existing pedestrian or cycle networks including, where appropriate, the green networks and core paths." (pg. 12) **Access to New Development** "Access requirements should be determined through a hierarchy of travel options with walking as the preferred option followed by cycling, then public transport and lastly private car use." (pg. 41) **Policy S2 centres and Retailing** "good active travel and public transport accessibility exists or can *be secured*" (pg. 49) **Kirkwall, Linkages and Connections:** "briefs prepared for each of the sites to specify these links to ensure that new development is both walkable and well connected into the existing Town. Reference should be made to the Kirkwall Active Travel Plan." (pg.70)		

	Historic Core Guidance "development proposals must enhance the walkable nature of the area through designing for pedestrians rather than for cars." (pg. 81/82) Supplementary Guidance: Orkney's Green Travel Plan June 2016.		
Perth & Kinross Council* 2014	**Economic Development** "Through the spatial strategy and general policies, the Plan promotes mixed use sites that will help minimise the need to travel by car and encourage travel by walking, cycling and public transport." (pg. 22) **Policy ED1: Employment and Mixed Use Areas** "There should be good walking, cycling and public transport links to new employment generating uses." (pg. 22) **Policy TA1B: New Development Proposals** "The aim of all development should be to reduce travel demand by car, and ensure a realistic choice of access and travel modes is available and should apply maximum on-site parking standards to help encourage and promote a shift to the more sustainable modes of travel of walking, cycling and public transport." (pg. 34) **Car Parking** "Where an area is well served by sustainable transport modes, more restrictive [parking] standards may be considered appropriate." (pg. 34) Provision for pedestrian and cycle routes also mentioned in specific developments. Sustainable Design and Zero Carbon Development supplementary guidance.	No statement Supplementary Guidance on Developer Contributions	Almond Valley village Bertha Park Marshalling Yards, Tulloch Oudenarde, Bridge of Earn Scone North
Renfrewshire Council* 2014	"The Council will support investment in locations where there is good access to walking, cycling and public transport networks." (pg.20) **Policy I1 Connecting Places** "Appropriate provision to connect to active travel and public transport networks, hubs and interchanges as well as allowing for walking, cycling and	No statement	Ferguslie, Paisely

	public transport accessibility requires to be considered from the outset with details outlining how this can be achieved." (pg. 22) Area maps with pedestrian and cycle routes in LDP. Supplementary Guidance on New Development which promotes sites that facilitate sustainable travel choices as an alternative to the private car. Streets design detailed in Renfrewshire's Residential Design guide.		
Scottish Borders Council 2016	**Policy PMD1: Sustainable Development** "Developers will be expected to incorporate: the encouragement of walking, cycling and public transport in preference to the car." (pg. 23)	No statement **Policy IS4: Transport Development & Infrastructure** "New developments should consider a range of sustainable transport initiatives including the provision of electric vehicle charging points." (pg. 120)	Glentress Hillview North, Coldstream Nethershot (phase 2), Kelso Lowood, Tweedbank
Shetland Islands Council 2014	Shetland Council identifies areas of best fit (AoBF) which can support development. They include areas: "within 800m (walking distance) of two of the following; convenience store/ Are within 800m (walking distance) of two of the following; convenience store/ post office (only one in any count), GP surgery, primary school, public hall and play park post office (only one in any count), GP surgery, primary school, public hall and play park." (pg.16) **TRANS1 Integrated Transport** Development supported where: "develop facilities for walking and cycling as an alternative and healthy means of transport." And "improve the human environment by promoting road design that meets the policy framework set out in Designing Streets and the six qualities of successful places as set out in Designing Places." (pg.46)	No statement	Stanley Hill, Lerwick

	Parking Standards "When considering reductions in the parking requirements for non-residential uses, all of the following will be taken into account: public transport accessibility, opportunities for walking or cycling and the availability of on and off-street parking." (pg. 5) **Policy TRA2 – Sustainable Access** "New major trip-generating developments will be directed to locations accessible by walking, cycling and public transport…" And "Such developments will be required to recognise the needs of cyclists and pedestrians as well as access to public transport routes and hubs, and have regard to the Council's Core Paths Plan." (pg.35)		
South Ayrshire Council 2014	**LDP Policy: Spatial Strategy** The LDP will support: "promoting, safeguarding and developing public transport networks, accessibility and cycling and walking networks." (pg. 3) **LDP Policy: Sustainable Development** "Wherever possible, is in an accessible location, with opportunities for the use of public transport, and other sustainable transport modes including cycling and walking." (pg.4) **Retail Outside of the town centre** "the development site is well connected to public transport and walking and cycling networks" (pg. 27) **LDP Policy: Land Use and Transport** "Where possible, closely link to existing and proposed walking, cycling and public transport networks." And "ensure essential use of the private car is accommodated within the context of an integrated approach to transport." (pg. 52) **LDP policy: town centre traffic management** "give priority to walking, cycling and public transport." (pg.54)	No statement	

South Lanarkshire Council* 2015	**New Retail/Commercial Proposals** New retail/commercial development should be "in locations that reduce the need to travel by private vehicle and be accessible by walking/cycling routes and public transport." (pg. 24) **Travel and Transport** "A longer term objective is to promote a change from private to public modes of transport." (pg.34) **Policy 16 Travel and Transport** "Development of walking, cycling and public transport networks which provide a viable and attractive alternative to car travel… will be supported." (pg.35)	No statement	Craighead, Blantyre Former Rolls Royce Works, East Kilbride Edinburgh Road, Biggar
Stirling Council* 2014	**Spatial Strategy** "Maximise potential for improved connectivity of these areas for public transport, walking and cycling." (pg.16) **Policy 2.7: Retail and Commercial Leisure Development** "Support will be given to small-scale (maximum 500 sq. gross floorspace) convenience retail development to serve the needs of existing or new residential/ employment/mixed use sites which are within a walk-in catchment of the proposed development, and are in a highly accessible location for walking and cycling." (pg. 40) **Policy 3.1: Addressing the Travel Demands of New Development** "a) In order to create accessible developments in sustainable locations, new development should be located where safely and conveniently accessible by walking, cycling and public transport as well as by motor vehicles. (b) Development should aim to reduce its travel demands, and to ensure that residual demands are met in a manner which ensures a safe and realistic choice of access by walking, cycling, public transport and motor vehicles." (pg.46)	Yes **Supplementary Guidance SG14** "The development operating or being part of a car club." (pg.20) Supplementary Guidance on developer contributions.	Raploch Eastern Villages, Durieshill

	Supplementary Guidance SG14 Ensuring a Choice of Access for New Developments "Providing a choice of access and promoting access by sustainable modes will be most easily achieved if the travel demands of a development are considered in the following order: (i) reduce the need to travel (ii) maximise access by walking, cycling and public transport (iii) identify mitigation measures required to accommodate residual vehicle trips" (pg.5) **Pedestrian, Cycle and Public Transport Access** "To meet the objective of ensuring a realistic choice of access to a development, development will need to demonstrate it is safely and conveniently accessible by pedestrians, cyclists and public transport users." (pg.9) **Car Free Development** "Proposals for residential and non-residential developments without car parking will be considered if it can be shown there will be no car parking demand for the development." (pg. 20) **Supplementary Guidance Placemaking** "Seek to locate development where it is accessible to a mix of uses and local services, and where good access or connections can be made to green travel routes and public transport. This can encourage people to travel by modes other than the private car and help sustain local services." (pg.18)		
West Dunbartonshire Council* 2010	**Local Transport Strategy** **Policy T1 Suitable Access** "The Council supports measures to provide sustainable transport modes including footpaths, cycle routes and improved access to public transport. The Council will give favourable consideration to proposals which increase	No statement	

	access to public transport services and path networks, particularly in respect of employment areas…" (pg.109) **Policy T2 Access Improvements** "The Council supports the sustainable transport principles outlined in SPP 17 and prioritisation of personal travel modes according to the walking, cycling, public transport and motorised modes travel hierarchy. Due to the relatively low levels of car ownership within the Plan area compared to the national average, there is considerable local reliance on public transport and use of the path networks." (pg.110) **Policy T4 Accessibility to new developments** "Developers should ensure that sites are well integrated into walking, cycling and public transport routes, and should give priority to the positioning of footpaths, cycleways and bus stops at the main entrances to developments or within residential areas." (pg.113)		
West Lothian Council* 2009	**Policy Env 38** "development, re-development or re-use must specifically promote both the principles of sustainable transportation, by including proposals that support the use of public transport, walking and cycling and the appropriate landscape treatment of the site." (pg.46) **Design Principles** "reduce car dependence by facilitating walking, cycling and by improving linkages by public transport; (public transport should be the key factor in shaping the pattern of development; place the needs of people before ease of traffic movement in designing the layout of residential areas" (pg. 109) **Policy Tran 2** "In accordance with SPP 17, the council has established development control practices which create a balanced mix of travel choices, including	No statement	Winchburgh Village

	walking, cycling and public transport, in order to reduce dependency on the car." (pg.131) **Policy Tran 7** "Walking is the most appropriate mode of short distance travel for most people and will be encouraged by providing a comprehensive network of safe, well-lit and convenient footpaths (both road-side and segregated) within new residential areas with links to schools, local centres, bus and rail stops and workplaces." (pg.134) **Policy Tran 8** "Developments must give priority to pedestrian and cycle access and provide facilities including traffic calming, controlled crossings, new paths and secure cycle parking." (pg.135)		

* Local Development Plan under review as at March 2017

13. Appendix C – Potential Case Studies

Overview

The following developments offer opportunities for further research into the testing of planning policies against delivery in the creation of low car neighbourhoods.

All eight developments have a stated aim at masterplanning and/or planning application stage of encouraging permeability and walking to local shops and services. All developments received planning approval after the adoption of Designing Streets in 2010.

Each development would also appear to have a location, population density and travel profile that would support and benefit from car club availability in the immediate area. Where there is existing access to a car club vehicle within walking distance this is noted.

A mix of urban, rural and edge of settlement locations have been selected for further review, alongside a range of development sizes; from new towns and neighbourhoods to small scale infill developments on urban sites.

Development	Location	Local Authority	Development Phase/ Completion Date	Density	Type
Chapeltown, Elsick	Stonehaven	Aberdeenshire Council	Phase two (2035)	Medium density	Major new settlement
Fraser Avenue, Inverkeithing	Inverkeithing	Fife Council	Phase one (2020)	High density	Mixed Regeneration /housing renewal
West Pilton Crescent	Edinburgh	City of Edinburgh Council	Completed 2014	High density	Urban
Athletes' Village	Glasgow	Glasgow City Council	Completed 2014	Medium – high density	Urban/brown field
Winchburgh Village	Winchburgh	West Lothian Council	Phase one (2025)	Low-medium density	Rural
Laurieston	Glasgow	Glasgow City Council	Phase one (C) 2018 - 2020	High density	Urban
Whitfield	Dundee	Dundee City Council	Phase three 2018 - 2020	Medium – high density	Urban
Huntly Crescent, Raploch	Stirling	Stirling Council	Completed 2012	High density	Edge of Settlement

Chapeltown, Elsick

Overview

Chapelton is the largest new town being built in Scotland. Five miles south of Aberdeen, this 809 hectare site in the Portlethen- Stonehaven corridor, is identified in the Aberdeen City and Shire Structure Plan for major development. The area is connected to the A90 to the east and the Aberdeen Western Peripheral Route to the west. Designed on the principles of New Urbanism, Chapelton will have 4,045 houses by 2023 and 8,000 in the long term, anchored by a high street with space for markets and a supermarket.

Chapelton is marketed as a pedestrian friendly development for the twenty first century. The Elsick Development Company promotes research that found that neighbourhoods with the features of New Urbanism – particularly walkability - command a 15.5% premium.[1]

Planning Context

Masterplanning of the site focused on creating a series of seven neighbourhoods. 60 house types and densities feature from flats and terraced houses close to the settlement's centre to detached homes on larger plots. The settlement is low density with 40% of the area remaining green with woodland, allotments, green corridors, wildlife areas and local parks.

Outline planning consent for 4,045 homes, and detailed consent for 802 houses, was granted in 2013. As of March 2017, 97 homes have been sold. The overarching planning aim is to offer residents a sustainable community, with a hierarchy of streets, where they can live, work and play without the need to travel. Every day needs such as shops, schools, offices, parks, meeting space and bus stops will all be within a 5 – 10 minute walk.

The processes described in Designing Streets were followed alongside a Quality Audit. The Scottish Government assessed Chapelton against Designing Streets. All six qualities stated in Successful Places were also complied with.[1]

Transport Summary

A new park and ride at Newtonhill Junction serves Chapelton. Buses to Aberdeen (30 minutes), Stonehaven (15 minutes) and Dundee (2 hours) are frequent. A free dial a ride service connecting the park and ride is available at peak commuting hours. As Chapelton grows, a direct bus service to Aberdeen will be provided and a town bus will circulate the neighbourhoods. The development links with National Cycle Route 1 and Aberdeenshire Cycle Route 5. A Public Transport Strategy was reviewed in June 2016.

Chapelton will be the first new town in Scotland to have a travel plan that seeks to support residents to reduce car use. Although the development aims to reduce out-commuting to very low levels, Chapelton is still marketed as car friendly. The design provides more parking spaces than required by the local authority, however, the design eliminates multiple driveways with parking on the street and in rear courtyards.[1]

There is significant potential for Chapelton to support car club vehicles as occupied housing increases. A new train station to serve the development is also under consideration.

Fraser Avenue, Inverkeithing

Overview

Fraser Avenue lies one kilometre south east from the centre of Inverkeithing. It was built in the 1950s to house workers in the surrounding area, including the nearby Rosyth Dockyard. The neighbourhood consists of 232 local authority flats in tenement blocks. The surrounding area is mainly cottages and private properties with Dalgety Bay nearby.

Fraser Avenue is in the 15% most deprived data zone areas in Scotland. The properties suffered historical long term vacancy and high tenant turnover, with 20% unoccupied at any one time. Fife Council decided to demolish the properties and build new affordable housing. The project requires the demolition of Fraser Avenue and one block of flats on Gray Place. The first phase of the development, with 53 new homes, was approved in 2015 and demolition began in November 2016. The regeneration of the neighbourhood will include shops, a village green and a play park.

Planning Context

The redevelopment of Fraser Avenue has been planned closely with the local community. A cross-organisational group structure has been set up to oversee the process. A key priority for is to increase permeability, attractiveness and walkability through remodelling the existing street. Fraser Avenue is a long, canyon-like street, unconnected to adjacent streets. It has one way in which can deter visitors and isolates the Avenue from the surrounding areas. It was felt that a new street pattern will help give the area a new, positive identity.

From the initial masterplanning stages, there was an aim to transform Fraser Avenue. With a planning focus on creating an integrated and cohesive new neighbourhood, the desired vision is a settlement woven into the fabric of the wider area.[1] The development will provide lower density terraced homes for existing residents with private gardens, open space within easy walking distance and open public streets.

Transport Summary

Fraser Avenue is within walking distance of shops, schools and services. The redevelopment seeks to create a safer place for pedestrians and cyclists by slowing down traffic through streetscape design and realignment. Each property entrance is overlooked and opens out into a wide space which is attractive for pedestrians.

The neighbourhood is served by eight regular bus routes including to Dunfermline (30 minutes), Edinburgh (40 minutes), Leven (60 minutes) and North Queensferry (15 minutes). Inverkeithing station is a 10 minute walk via Boreland Road. Four trains each hour go to Edinburgh (20 minutes) with services every 30 minutes to Dunfermline and Kirkcaldy. There is also a train to and from Glasgow once a day. Services to Aberdeen (2 hours 30 minutes) and London Kings Cross (5 hours) stop at the station and two large free park and ride car parks are provided for travellers. Ferrytoll park and ride is also situated just outside Inverkeithing.

There is potential for Fraser Avenue and Inverkeithing generally to support a car club.

West Pilton Crescent, Edinburgh

Overview

West Pilton Crescent is set within a residential area three miles north-west of Edinburgh city centre. The neighbourhood is bounded by a main thoroughfare – Pennywell Road - within one of the most deprived data zones in Scotland. The Crescent is part of the wider regeneration of Pennywell and Muirhouse. Planning permission was granted in 2013 and the development of 31 flats and 3 houses completed in 2014. West Pilton Crescent is part of Edinburgh City Council's 21st Century Homes programme and the development is the first council rented housing to be built in Edinburgh for decades.

Designed to be an exemplar of modern housing, there is one large block of flats arranged over two, three and four storeys with three houses adjoining the main block. The majority of the one, two and three bedroomed flats are accessed by internal stairs. The houses and ground floor flats have their own private entrances. A key objective of the development was to create a characterful and cohesive new neighbourhood which knits into existing streets and improves the public realm link between the adjoining primary and secondary schools.

Planning Context

Masterplans and a design guide were prepared for the wider area and the site at Pennywell Road/West Pilton Crescent is one of ten separate sites identified within the masterplan area.

Local residents have been heavily involved in shaping plans for the public spaces within the development and the overall master plan for the area. The architects sought to reference the tenement style of Edinburgh's New Town and this is reflected in pedestrian space which carries the same materials from pathways into entrance lobbies. The masterplan has a stated design aim of creating a sense of pedestrian priority.[1]

Transport Summary

West Pilton Crescent is a well-connected residential neighbourhood located on three bus routes served by frequent, regular services to the city centre (20 minutes) and Edinburgh Royal Infirmary. A night bus service also serves the area and a new bus service to Edinburgh airport is scheduled to start in April 2017. Several major employers are within easy walking and cycling distance including; the Western General Hospital, Edinburgh College, BAE Systems, local hotels and supermarkets. West Pilton Crescent is 3 miles north of Haymarket train station and interchange. It is located 500 metres from National Cycle Network Route 1 and also links with local cycle paths.

Two car club vehicles are available at West Granton Road (10 minutes' walk) and Hillhouse Road (30 minutes' walk).

Athletes' Village, Dalmarnock

Overview

The Athletes' Village in Dalmarnock, is situated in Glasgow's east end. The settlement is within one of Europe's largest regeneration areas, 5km southeast of Glasgow City Centre. The Village is one of the most significant recent urban developments in the UK and represents a mixed use regeneration scheme in a former industrial area. The Athletes' Village was initially constructed on a disused brownfield site for the 2014 Commonwealth Games. After the Games, the area was redeveloped into a residential neighbourhood with 700 new homes, a care home, green spaces and riverside walks. The housing is a mix of densities ranging from two bedroom apartments to four bedroom detached houses, 400 available for rental and 300 for private sale.

This project presented major planning and design challenges – creating short term accommodation for athletes with a longer term vision of creating a new, connected and permeable neighbourhood in Glasgow.

Planning Context

The masterplanning of the site sought ensure the street design was determined by townscape considerations rather than economic factors. It focused on the provision of family housing with the majority of the buildings two storey. Much of the housing is arranged in terraces which defines a clear urban pattern of street frontage and public space. The housing is broadly a 50/50 mix of private and social properties and a care home, interwoven in order that tenures become indistinguishable. The masterplan is divided into character zones, each of which has a different design differentiated by factors such as street forms, the spacing between buildings, the pedestrian experience and materials. Homezone surfaces were included with the aim of reducing speeds, discouraging car use and encouraging walking and cycling.

Transport Summary

The development features a range of pedestrian and cycle paths, as well as a new riverside walkway along the River Clyde. The new Forestry Commission Cuningar Loop woodland park can be accessed via a new footbridge across the river.

Changes to the transport infrastructure have included an extension to the M74, and an upgrading of Dalmarnock Station which enables access to the city centre in 10 minutes. The Athlete's Village is also in close proximity to eight key bus routes, including to the city centre (15 minutes), which operate along Springfield Road, Sunnybank Street and Dalmarnock Road. A night bus also serves the development. The Clyde Gateway service offers hourly buses between Rutherglen Town Centre and Carmyle Station and the Clyde Gateway business park in Auchenshuggle. This bus service also links four train stations, including Dalmarnock.

Two car club vehicles are available beside the development at French Street, Dalmarnock.

Winchburgh Village

Overview

Winchburgh village is one of the UK's biggest mixed use developments, focused on the enlarging of a rural community ten miles from Edinburgh. The development will comprise over 3,000 new homes, new primary and secondary schools, a town centre and park, retail facilities and a commercial park. A marina and moorings on the canal in the centre of the village is also planned.

Planning permission was granted in April 2012 and 177 houses have been completed. 96 affordable housing units for social rent are currently being built. Over 500 homes will be completed by mid-2017.

Planning Context

Winchburgh was identified as a Core Development Area in the West Lothian Local Plan 2009 to enable redevelopment of historic brownfield sites, including large oil shale bings, surrounding the village. It is also identified in the proposed West Lothian Local Plan (see Appendix B). The masterplan for the site was approved in 2012.

The Edinburgh and Lothians Structure Plan 2015 identifies the Winchburgh area for the allocation of up to 5000 houses with a minimum of 3000 over the structure plan period. The masterplan has a stated aim of being an exemplar in sustainable planning and one of its core objectives is to prioritise walking, cycling, bus and train. However, this is not fully reflected in the current transport assessments for the development (see below).

Transport Summary

Winchburgh is described as a commuter village in marketing literature. To the north is the M9 with access to Linlithgow and Falkirk and eastward to the M8 to Livingston. Broxburn is to the south of the development. There are buses to and from the area including to Edinburgh (40 minutes), Linlithgow (20 minutes), Falkirk (50 minutes), South Queensferry (25 minutes) and Broxburn (10 minutes). The bus service links to train stations at Linlithgow and Falkirk. Conditional planning permission has been granted for a new rail station and motorway junction with park and ride to serve Winchburgh Village. There is some doubt as to whether a new station can or will be built. A public transport strategy will be submitted.

The development has a target of 20% travelling to work by public transport. A network of cycle paths and pedestrian walkways aim to facilitate access to shops and services, however, it would appear that walkability has not been designed into the scheme. The masterplan and consents for Winchburgh Village are under continual review as units are built and developers respond to market conditions.

Winchburgh Village presents an opportunity to promote low car development to ensure the development does not become reliant on car based commuting via the new M9 junction. This large scale development also has the potential to benefit from a car club.

Laurieston, Glasgow

Overview

Laurieston is a neighbourhood in the densely populated Gorbals area of Glasgow. It is situated south of the River Clyde, a 10 minute walk from the city centre. Laurieston regeneration area is adjacent to the highly successful Crown Street regeneration. Following the demolition of four tower blocks in 2008 and 2016, the neighbourhood is undergoing large scale redevelopment.

Work started on site in 2012 and the first two phases of development are complete. Phase 1C is currently underway, with 46 flats for social rent and 9 for shared equity. Phase 2 started in March 2017 with housing for sale to the north of Bedford Street. The regeneration of Laurieston includes over 800 new homes, many for social rent, offices, shops, a hotel, student accommodation and a city park.

The mixture of townhouses and flats has been modelled on traditional tenement housing patterns but includes a wide variety of housing types including apartments, maisonettes and terraced houses.

Planning Context

The regeneration of Laurieston has been an active consideration since the mid-1990s. Laurieston is now one of Glasgow's Transformational Regeneration Areas and the development's design strategy has taken a best practice approach with the aim of creating a vibrant, permeable neighbourhood.

The masterplanning of the area has evolved over many years, particularly with regards to housing design and parking. In the early 2000s parking for the development was prescriptive. The approved masterplan (2012), however, is based around five principles focused on creating a sustainable neighbourhood. These include the linking of the area to the City Centre, Crown Street and the regeneration of Bridge Street/Eglinton Street as a new local high street and transportation hub.

Transport Summary

Laurieston is within walking distance of Glasgow city centre (10 minutes) and the development has sought to prioritise pedestrians over cars, stating during the planning process that car ownership should not be essential for residents. Laurieston is served by Bridge Street subway station and regular bus services throughout the city centre. No new public transport services are planned for the area.

The development is within 10 – 15 minutes' walk of several car club vehicles including vehicles on King Street, Charlotte Street and Mitchell Street.

Whitfield, Dundee

Overview

Whitfield is a residential area in the north of Dundee. The neighbourhood was built to accommodate population expansion in the 1960s, and largely consisted of homogenous high rise flats. The estate layout created paths at a great distance from roads and bus stops and the neighbourhood lacked permeability. Remote car parking lacked overlooking and was identified as particularly problematic.[1] Between 1981 and 2006 the residential population fell by more than 65% and by 2004 Whitfield contained two data zones in the most deprived 15% of areas in Scotland.

The neighbourhood has undergone substantial redevelopment since 2006, including the demolition of high rises and the building of 111 new homes for social rent. There is planning permission for a further 120 private houses, and a total of around 800 homes are planned in the long term. Over 4,000 people now live in Whitfield - attributed to the positive place-focused regeneration of the area.

Planning Context

The Whitfield Masterplan aims to address issues of permeability within the new housing, shops, community facilities, and school and recreation space. A new road – Lothian Road - has been created to discourage use as a thoroughfare by enforcing low vehicle speeds. It is at the top of a hierarchy of streets and paths connecting the settlement. During the planning process it was stated that pedestrian and cycle routes should be more direct than vehicle routes.

The redevelopment of the area is supported by a planning framework. First drafted in 2006, the framework was revised in 2015. The regeneration of the area is a collaborative process between public bodies, local community groups, and school children working with the design professionals, public artists and the contractor. Guide Dogs Scotland were also closely involved in elements of planning, particularly public realm design, and Dundee College provided trial hard landscaping for use testing by disabled people.

A 1960s janitors' house has been transformed into a demonstration eco-house, Sun City House, to provide education, advice and information about domestic scale renewable energy, energy efficiency and sustainable construction to the general public.

Transport Summary

Lothian Crescent was completed in 2011. Whitfield is three miles from the centre of Dundee and is served by regular bus routes including to and from the city centre and Dundee train station (20 minutes). The redevelopment also aims to maximise access to the nearby countryside and a cycleway and footpath follows the route of Lothian Crescent through the centre of Whitfield and extends into areas of housing, linking with schools and community facilities.

There is potential for Whitfield to benefit from access to a car club.

Huntly Crescent, Stirling

Overview

Huntly Crescent is a small mixed-use residential and commercial infill development located on the corner of Raploch Road in the residential settlement of Raploch, adjacent to Stirling. A community since the fifteenth century, Raploch underwent major transformation with large-scale housing estate development in the twentieth century. The area – once home to industry and local employers – declined rapidly during the 1980s and was identified as one of the most deprived areas of the UK. In 2004 Raploch received Urban Regeneration pathfinder status which delivered a decade long programme of regeneration - including the creation of 900 new homes, job opportunities, new infrastructure and public spaces.

Huntly Crescent - completed in 2012 - is comprised of 3 timber constructed commercial units with residential accommodation above. The development was planned to be car free and is currently the only example of entirely car free mixed use development in Scotland.

Planning Context

The Huntly Crescent development was shaped by the Raploch masterplan which placed emphasis on a strong sense of place, safer streets and the creation of a walkable community with village square and community campus. Local identity and the opportunity for interaction in public spaces was sought through artworks and public places. There was a stated planning aim of encouraging walking and cycling and the design linked to a new River Walkway.

Streetscape was designed with pedestrian priority including measures such as shared surfaces. Traffic calming was also employed to increase pedestrian safety. Huntly Crescent was specifically planned to be a car free development, benefitting from its location at the heart of the pedestrian focused redevelopment of Raploch and adjacent to Stirling city centre.

Transport Summary

Huntly Crescent and Raploch is well served by regular bus routes to and from Stirling city centre and Stirling train station (10 minutes). It is within 25 minutes' walk of Stirling train station. The Raploch Travel Guide, produced by Sustrans, offers a map and information for residents on sustainable ways to travel in the area. The guide is also designed to encourage new and existing residents to substitute car journeys for walking, cycling or public transport.

Huntly Crescent, neighbouring developments and the wider Raploch area would benefit from a car club.