Halcrow Group Limited

Rothesay Active Travel Audit

Final Summary Report

December 2010

HITRANS

Halcrow Group Limited

Rothesay Active Travel Audit
Final Summary Report

December 2010

HITRANS

Halcrow Group Limited
Camas House Fairways Business Park Inverness IV2 6AA
Scotland
Tel +44 (0)1463 231 707 Fax +44 (0)1463 243 726
www.halcrow.com

HITRANS

Rothesay Active Travel Audit
Final Summary Report
December 2010

Contents Amendment Record

This report has been issued and amended as follows:

Issue	Revision	Description	Date	Approved by
		Initial Draft Report	31/8/10	CK
1		Draft Report	02/12/10	JP

Contents

1 Introduction

1.1 Background

1.1.1 Halcrow Group Ltd was commissioned by HITRANS, the Highlands and Islands Regional Transportation Partnership to:

- Develop a methodology to audit existing active travel infrastructure
- Provide baseline information on existing infrastructure provision for active travel
- Recommend priority areas for future investment

1.1.2 The overall aim is to assess where best to apply available funding in order to increase the potential for active travel and ideally to see an increase in the number of people choosing to walk or cycle.

1.1.3 In particular, the key purpose of the audits is to identify:

"A practical network of high quality routes suitable for cycling within each settlement that provides convenient and safe access to all major destinations"
and
"A network of routes for pedestrians focused upon railway stations, bus stations, ferry terminals, major employment areas, local shopping areas, leisure/recreation centres, hospitals and main trip generators."

1.1.4 This document summarises the main findings of the methodology as applied to Rothesay.

2 Active Travel Methodology

2.1 What is the methodology?

2.1.1 Halcrow has developed a methodology to assess existing and proposed active travel infrastructure. This methodology is based on the following key parameters:

- A desktop study including demographics, travel to work patterns, public transport information and traffic accident data
- Analysis of main trip generators/attractors
- Consultation with the Local Authority and other interested parties
- On site audits
- Application of a 'prioritisation filter'

2.1.2 The prioritisation filter is an analysis tool to identify those corridors where there is the greatest potential for modal shift. The filter encompasses information from the desktop study such as demographic data, trip generators and attractors, planning proposals and the results of stakeholder consultation. The filter also assesses the 'implementability' of a route compared to its potential usage.

2.1.3 On site audits for walking are carried out utilising the Transport Research Laboratory (TRL) Pedestrian Environment Review System (PERS). For cycling, an Institution of Highways and Transportation (IHT) cycle audit is undertaken. Both systems audit the condition of existing facilities for pedestrians and cyclists to identify where proposed measures can be effectively targeted.

- The outputs from the application of the methodology are:
- An Active Travel Prioritised Action Plan
- An Active Travel Master Plan

2.1.4 The prioritised action plan identifies areas and potential interventions where there is the greatest potential to achieve modal shift or where there is the greatest need for infrastructure for pedestrians and cyclists. The master plan is a core network for pedestrians and cyclists that provide direct, convenient, safe, attractive and coherent links between journey origins and journey attractors. The proposals contained within the prioritised action plan and master plan will require further investigation and feasibility work.

2.1.5 Consultation also plays an integral role in the identification of routes for walking and cycling and also helps to pinpoint, at a very local level, the barriers to active travel. In Rothesay the following individuals and organisations were consulted:

- Argyll & Bute Council: Sustainable Travel Coordinator/Access Officer
- Sustrans
- Local bike shop
- Local residents
- Rothesay CHORD Programme Manager

3 Walking and Cycling in Rothesay

3.1 Overview of current conditions for active travel

3.1.1 Rothesay is the central town on the Island of Bute, located on the west coast of Scotland. The settlement has a resident population of 5017 according to the 2001Census. Of the total population, 3551 were economically active. Rothesay is home to a harbour, which facilitates a frequent ferry service to Wemyss Bay in Inverclyde. The harbour, adjacent taxi rank and bus service area provide a transport interchange point. The town centre has relatively flat terrain however the main residential areas to the north of Barone Road and east of High Street are located on higher terrain.

3.1.2 Rothesay is the largest town on the island and acts as a gateway to Bute. A vibrant town centre can be found within 200 metres of the ferry terminal which is home to a number of shops, including common stores such as the Co-op and Superdrug and also has gift, craft and souvenir shops which target the influx of tourists from the mainland. As a reflection of the number of small shops approximately 14% of the resident population are employed in the retail sector.

3.1.3 A network of footways exists throughout Rothesay with good provision for pedestrians between the ferry terminal and Montague Street, which acts as the central hub of the town. As Rothesay faces the coast, footway provision is excellent and is a reflection of the number of tourists which regularly use this area of Rothesay.

3.1.4 Table 3-1 below show comparisons of how people travel to work in Rothesay compared to the region and the whole of Scotland.

Table 3-1: Comparison of mode of transport for journeys to work and study – regional and national comparison

Mode of transport	Rothesay	Argyll & Bute	Scotland
% taking bus	14.4	5.5	16.5
% car and passenger	46.7	56	53
% cycle	1.4	1.4	1.3
% walk	37.5	19.4	23

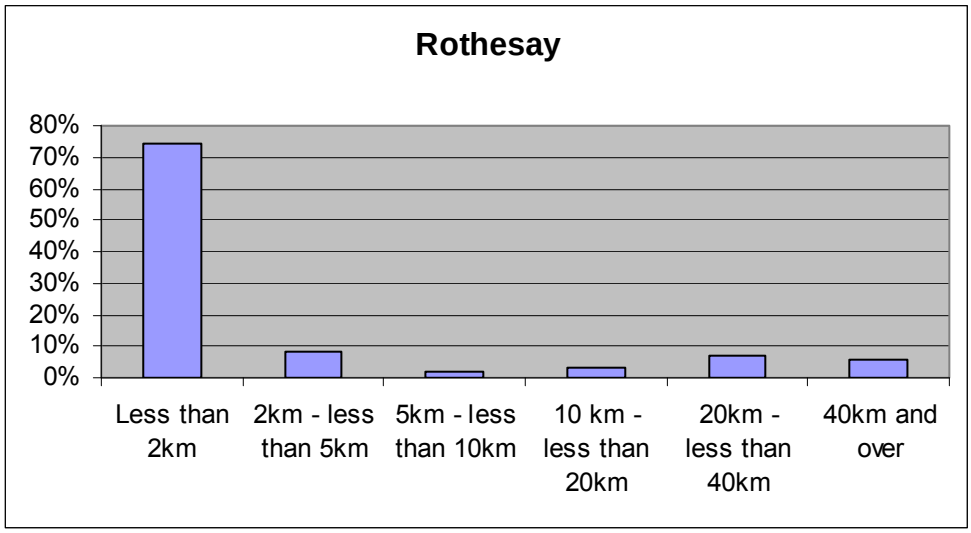
(Data supplied by SCROL)

3.1.5 In Argyll and Bute, travel by bus is low at 5.5% when compared to the Scottish national average. Rothesay does have a higher level of public transport use than the regional average for Argyll and Bute although this remains approximately 2% below the Scottish national average. Access to the private car in the study area is around 47% and is lower than the Scottish national average which is approximately 66% according to the 2001 census results. This is quite unusual given the rural location of Rothesay, although this is in line with the majority of journeys to work being less than 2km and therefore showing that most residents in Rothesay are likely to work in Rothesay.

3.1.6 Access to the private car may be lower in Rothesay than both regionally and nationally, however cycling as a mode of travel to work is in line with the regional average for Argyll & Bute. At the last census 37.5% of residents in the study area chose to walk to work, far higher than the average for Argyll and Bute and indeed Scotland.

3.1.7 Census data has been used to provide a snapshot of the distances travelled to work and study in Rothesay and are shown in Figure 3-1.

Figure 3-1: Distance travelled to work and study



3.1.8 Within the study area few journeys to work exceed 2km. In fact over 70% of journeys are less than 2km (which is the equivalent of a 6 minute bike ride or a 20 minute walk). The mode share percentage for walking in Rothesay is 37.5%, whilst cycling is 1.4%, when compared to the fact that over 70% of journeys are less than 2km, provides clear evidence that there is vast potential to increase the share of journeys on foot and by bicycle. The topography could be a barrier which currently constrains walking and cycling for those residing on higher areas surrounding the town centre.

3.2 Study Area

3.2.1 Rothesay is the largest settlement on Bute, and can be accessed by ferry from the mainland. Rothesay comes alive during tourist seasons, bustling with visitors alighting from the Wemyss Bay ferry. A frequent ferry service operated by Caledonian MacBrayne provides a connection from Wemyss Bay in Inverclyde directly to Rothesay. A further ferry service is also available between Rhubodach at the north end of Bute and Colinraive on the Dunoon and Cowal peninsula. The ferry crosses the Kyles of Bute between Rhubodach and Colintraive and provides a frequent service departing each side at 20 minute intervals during weekdays and 30 minutes at weekends.

3.2.2 Rothesay is the main town on Bute and can be found midway between the northern and southern ends of the island on the east coast. The influence of the Victorian era is still visible throughout Rothesay, with narrow streets and characteristic buildings. During this period Rothesay became prosperous with high numbers of people from the mainland adopting Rothesay as a holiday destination. Unfortunately the popularity of package holidays abroad has had a negative impact on Rothesay over the past 50 years, with a decline in tourist numbers. Some investment was made during the 1990's in Rothesay which focused on the Esplanade area and harbour frontage, and has helped improve Rothesay's popularity in recent years, together with an improved ferry service to the mainland.

3.2.3 An electric tramway once linked Rothesay with Ettrick Bay on the west of the Island of Bute, however this was closed in the mid 1930's and no trace of this is apparent in the study area today.

3.2.4 There are an array of road connections to Rothesay from the rest of Bute, however three particular roads departing from Rothesay act as district distributors providing a basis for strategic travel across the Island. The first of these roads is the A844 which provides a southerly connection to the villages of Ascog, Kerrycroy, Scoulag and Kingarth. The second is the B881 which travels in a south westerly direction alongside the popular Loch Fad and onto the A844 as it travels the length of the islands west coast. Finally, the A886

provides a connection between Rothesay and Port Bannatyne, and if continued north reaches Rhubodach some 8 miles north of Rothesay.

3.2.5 The study area forms a linear pattern along the coast, with High Street providing a route inland. Radiating from the coast and Rothesay's centre the topography becomes steep. The majority of the residential areas are located on the hillier areas surrounding the town centre such as at Eden Drive to the south of the town and Hillhouse Road to the north. The types of housing vary dramatically, with coastal properties being larger and often providing bed & breakfast accommodation, whilst located to the north and south of the town centre on higher ground is a mixture of social and private housing.

3.2.6 Rothesay town centre is pleasant and has an array of retail outlets, which serve residents as well as a healthy volume of tourists. The footways throughout Rothesay vary in quality from street to street, however on the whole footways are of an acceptable width, and only localised surfacing issues are visible. Examples of which are shown below in figure 3.2 and 3.3. Of interest is figure 3.2 Bishop Street, as the carriageway has had recent resurfacing, however the footway has only seen partial re-surfacing.

Figure 3.2: Inadequate surfacing on Bishop Street

Figure 3.3 Inadequate surfacing on High Street

3.2.7 Montague Street is located in the heart of Rothesay and is one street back from the coastal frontage. Montague Street is one way and is accessed from High Street. In 2007, the Rothesay Town Centre, Traffic Management and Amendment Order was approved and now restricts waiting times on a number of central streets including, East Princes Street, Albert Place, Bishop Street and Victoria Street. Argyll and Bute Council state that the order is intended to improve traffic management and provide more parking for shoppers in Rothesay. The loading access times for businesses in Montague Street were altered as a result of the new traffic order, and now access is only available from 8am until 10am. Along Montague Street there is attractive block style paving and cycle parking is available. The street provides a vehicular connection between High Street and Bridgend Street, however site audits highlighted a problem with HGV traffic and tour buses using Montague Street during the day. This combined with on street parking results in the retail area becoming very congested which reduces the attractiveness of walking and cycling in the town centre. Figure 3.4 below shows two instances of vehicular obstructions.

Figure 3.4: Vehicle Obstruction - Montague Street

3.2.5 The study area has a good level of directional signage ***for pedestrians. However, much of the signing has been added to over the years which has resulted in an uncoordinated and worn appearance being common throughout signage in Rothesay.***

Figure 3.5: Examples of uncoordinated signage within Rothesay

3.2.8 The frontage to Rothesay provides an attractive walking environment with footways along the length of Victoria Street, Argyll Street, Ardbeg Road and Mount Stuart Road and a traffic free esplanade and attractive park in the town centre close to the ferry terminal. There are some issues with regard permeability between Argyll Street and Albert Place due to the vehicular access point for ferry services, whereby currently no facilities exist to aid crossing by pedestrians. There is a zebra crossing at Albert Place, and limited crossing facilities at the roundabout where Albert Place and Bishop Street meet.

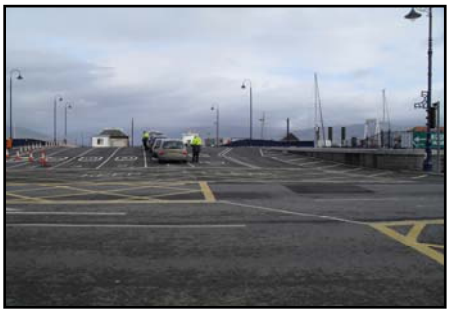


Figure 3.6: Lack of pedestrian facilities

Figure 3.7: Zebra Crossing at Albert crossing facilities at ferry terminal Place

3.2.9 Visible in the background of figure 3.7 is an access point adjacent to Guildford Square for bus services on the island. Around 10 bus services operate in Rothesay with each either originating, passing or terminating at Guildford Square. Services throughout Rothesay are provided by West Coast Motors, and are relatively frequent during the day, with many also providing an hourly service in the evenings.

3.2.10 There are currently three primary schools; St Andrews Primary, Rothesay Primary School, North Bute Primary and one secondary school, Rothesay Academy, in the town. In 2007 a joint campus school was opened merging Rothesay Primary with Rothesay Academy. The campus rests over 1km to the south of the town centre and is out with the main settlement. High Street provides the main connection to the residential areas of Rothesay from the campus however some issues relating to the presence and width of footways exist, particularly from the campus entrance in a northerly direction until the approach to the Victoria Hospital is reached. Parked cars on the narrow footways cause obstructions to travel on foot along this section of High Street. High numbers of school children appear to walk to school along High Street, despite the slight incline in topography and the issues with permeability described above. Figure 3.8 below shows the new Rothesay School Campus.

Figure 3.8: New Rothesay School Campus

3.3 Existing provision for cycling

3.3.1 There is little dedicated provision for cycling in Rothesay, however, levels of cycling to work match the national average (1.4%) even though over 70% of all journeys to work are less than 2km. There are no National Cycle Routes on the Isle of Bute, leaving a significant gap in the Firth of Clyde networks.

3.3.2 There are no cycle-specific signs in Rothesay, other than those present at cycle parking locations. There was also a notable lack of cycle literature in the tourist information centre.

3.3.3 There are no traffic free cycle facilities in Rothesay, which in turn means cyclists have to use the roads network. The majority of roads are well maintained, although there are some exceptions, specifically around the newly installed roundabouts which have begun to break up. The flat coastal road which runs from Ascog to Port Bannatyne is wide and well maintained, although it is narrowed by high levels of on street car parking during tourist seasons.

3.3.4 During the audit process a variety of cyclists were observed. Although the weather was mixed, commuters, shoppers and school children were noted but mainly limited to the flat coastal road, High Street and the associated shopping streets.

3.3.5 The main barriers to cycling in Rothesay are topographical and climatic. The trip generators within Rothesay can be found along the flat coastal road, High Street and the associated shopping streets. The majority of the population however, are to be found on the steep slopes which surround the main routes. During the audit process, several people were observed pushing their bikes up these hills. The gradients are steep and the compact nature of the settlement may make the option of walking more attractive than cycling. Within the town centre itself, the roads become narrower with high levels of on street car parking and several one-way streets. These again create barriers to cycling, limiting cycle movements and eliminating desire lines.

Figure 3.9: Damaged surfacing

Figure 3.10: Steep hills to town centre

3.3.6 Figure 3.10 shows Serpentine Road, which during the festival of cycling held annually on the Island, provides a gruelling challenge for many cyclists, in the Serpentine Hill climb. The study area is home to the Bute Wheelers, a group established to encourage cycling, cycle safety and good fellowship amongst cyclists. The group are active in the Bute community organising a number of local cycling events which often attract between 50 and 100 participants. The most well known of the Bute Wheeler organised events is the Bute Triathlon, which utilises the leisure pool and a number of the rural roads surrounding

the study area. Rothesay also has a bike shop, “The Bike Shed”, located on East Princes Street. The shop has been established for around 6 years and provides for sale a range of bicycles and accessories and also provides the option to hire bicycles.

3.4 Existing cycle parking

3.4.1 Rothesay has a number of cycle parking facilities, all of which are standard Sheffield stands, however no shelter from the elements is provided. These facilities were located in reasonably accessible locations, however some cycle parking particularly adjacent to the ferry terminal is not ideally located, and is therefore difficult to find. During site audits cycle parking was not well utilised, and a number of signs were in a state of disrepair.

Figure 3.11 Cycle parking at Albert Place

Figure 3.12 Cycle parking at Watergate

3.4.2 The new school campus on the edge of town has a good standard of cycle parking with a high level of uptake. Cycle parking in the town centre was present around the larger car parks and on Montague Street, but use of cycle parking was low during site audits, which appeared to be because cyclists chose to leave their bicycles at informal locations, which were closer to their destination.

3.5 Traffic flow and accident data

3.5.1 Argyll & Bute Council were consulted with regards available traffic flow and accident data for within the extents of the study area. No recent traffic flow data was available, however accident data was supplied for a four year period covering 2006 to 2009.

3.5.2 The accident data shows that there was a total of eight accidents involving pedestrians in the study area, of which seven were slight and one serious. A single accident involving a cyclist also occurred in the four year period examined.

3.5.3 High Street and Castle Street were the main locations for pedestrian casualties and in all cases involved a pedestrian crossing the carriageway and colliding with a motor vehicle. The serious pedestrian casualty occurred on Castle Street and involved two cars, again the pedestrian was crossing the road when the collision took place. As stated above only one cyclist casualty occurred and was at the junction of Victoria Street and High Street in 2008. The results of the accident analysis have been used to inform the priorities identified within this report.

3.6 Local Transport Strategy

3.6.1 Argyll & Bute Council's Local Transport Strategy (LTS) entitled "Moving Forward" covers a period between 2007 and 2010. The LTS document identifies 5 high level objectives extending to;

- Encourage a growing and sustainable economy in Argyll & Bute;
- Improve peoples transport experience;
- Manage the effect of transport on Argyll & Bute's rich natural environment;
- Improve accessibility for all our communities; and
- Improve journey safety and personal security for everyone in Argyll & Bute.

3.6.2 Positioned below these high level objectives are a number of outcomes the LTS aims to achieve, of which those which will have both a direct and indirect impact on sustainable travel, in particularly walking & cycling are:

- Economy: Support our local economy through the provision of an efficient, reliable and affordable transport network;
- Integration: Improve interchange facilities and the integration of our local services where possible;
- Environment: Increase the number of journeys taken by sustainable modes, e.g. bus, train, walk, cycle;
- Safety: Improve infrastructure to make the transport network safer; and
- Safety: Work in partnership with other agencies to create a safe and secure environment of the transport network.

3.6.3 In addition the LTS has identified four aims with regard active travel, which include; development of a walking and cycling strategy, the development and implementation of travel plans, improvements to infrastructure for active travel and promotion of the benefits

of active travel. The priorities identified as part of the active travel audit process seek to take cognisance of the aims identified within Argyll and Bute's Local Transport Stategy.

3.7 Local Plan

3.7.1 The adopted Argyll and Bute Local Plan 2009 outlines the following development within the study area:

- Office and light industrial development at Union Street;
- New School Campus at Townhead (in place);
- 16 Housing units at Barone Road;
- 40 housing units at Craigmore;
- Medium density housing at Westlands road;
- Rothesay Town Centre/Waterfront Strategic town centre/harbour development and & management; and
- Development and environmental enhancement at Barone Road/High Street.

3.8 Core Paths Planning

3.8.1 Argyll & Bute Council's Core Paths Plan Consultative Draft public consultation period ended on the 1st of June 2009. The Final Consultative Draft Core Path Plan will go out for statutory consultation in 2010 from which the Council aims to formally adopt the plan, should no objections be outstanding. Within Rothesay a number of proposed core paths exist including the footways along Argyll Street, Victoria Street and High Street. The Land Reform Act states that all core paths should be signed and promoted within two years of the adoption of the Council's Core Paths Plan and so consideration and an integrated approach should be adopted to ensure the priorities identified within this report are incorporated within the core path promotional exercise.

3.9 CHORD

3.9.1 Argyll & Bute Council has an ambitious regeneration programme in five of its waterfront towns, and includes Rothesay. The Council has allocated more than £30 million to the programme to drive regeneration activities and persuade other to invest. There will be major improvements to town centres and waterfronts of all five towns. There are two particular projects which have come forward for Rothesay. The first of which includes the identification of a sustainable re-use to enable the restoration of the Category A listed Rothesay Pavilion. The second is the implementation of a Townscape Heritage Initiative to restore the fabric of a prominent part of the town centre primarily focused around Guildford Square. The two CHORD proposals for Rothesay aim to revitalise the historic town centre and draw attention to the town.

3.10 Current Issues

3.10.1 The audit process identified a number of key issues which may act as a disincentive for those wishing to walk or cycle within the settlement:

1) Topography
Residential areas within the study area are located on steep topography which can often be a barrier for uptake of walking and cycling.

2) Location of cycle parking
Cycle parking is provided but not in the right location.

3) Lack of cycling facilities
May be difficult to promote cycling with few dedicated facilities.

4) Legibility
Pedestrian signing is outdated and uncoordinated.

5) School campus located outwith settlement
The new campus is located over 1km to the south of the town centre and is outwith the main settlement and connections to residential areas are poor.

6) Existing traffic management favours motorised vehicles
One-way streets limit accessibility by bike and retail area is dominated and congested by traffic.

3.11 SWOT (Strengths, Weaknesses, Opportunities and Threats) Analysis of Active Travel in Rothesay

Strengths	Weaknesses
• Wide footways along sea front • Pleasant walking and cycling environment along the coastal frontage of Rothesay • Availability of cycle parking facilities • Venue for annual cycling festival and Bute Triathlon • Good local bike shop • Proactive local cycling organisation “Bute Wheelers”	• Steep terrain surrounding town centre • Congested town centre along Montague Street • Town centre parking is obstructive • Cycle parking inadequate • Existing low utility cycling levels • One way streets discourage cyclists • Signage is uncoordinated
Opportunities	**Threats**
• Improve connectivity to the new school campus • Signage improvements for Rothesay • £1.5m potential funding from Townscape Heritage Initiative • Introduce contra-flow cycling	• Lack of funding to improve active travel infrastructure • Potential reluctance to embrace active travel

N

0 250m 500m

Rothesay Potential Active Travel Audit

Figure 3.1: Exisiting Active Travel Network

Key:

- Controlled pedestrian crossing
- Advisory 20mph zone
- Path suitable for walking and cycling

NOTE: Potential routes shown are indicative and are subject to change as a result of consultation, feasibility and design.

Halcrow

4 Potential Rothesay Active Travel Network

4.1 Introduction

4.1.1 The active travel audit identified potential walking and cycling routes that could link residential areas to the main trip generators and attractors to form a strategic network for the area. The main trip generators are:

- Ferry terminal;
- Swimming Pool;
- Victoria Hospital
- Golf Course;
- Co-operative Supermarket; and
- Rothesay Joint School Campus

4.1.2 The study has developed a set of long term objectives for encouraging walking and cycling as follows:

Objective 1: Develop a co-ordinated signing strategy

Objective 2: Reduce the barriers to cycling and the dominance of vehicular traffic in the town centre

Objective 3: Provide an enhanced walking and cycling route between the new school campus and key areas of residence

4.1.3 The above objectives have been established based on the results of on-site audits and the desktop study. These objectives have been aligned to complement the key strengths which Rothesay has to offer whilst addressing the current weaknesses in terms of active travel.

4.1.4 Due to the terrain surrounding Rothesay, much of the existing walking and cycling occurs in the town centre area and along the coast. A high level of traffic was present during site audits within the narrow streets of the study area, significantly reducing permeability on foot and by bicycle.

4.2 Active Travel Network

4.2.1 The following corridors have been identified as having the potential to provide the most direct and coherent network of routes to the destinations listed in 4.1.1. The routes are:

- School campus to town centre
- Montague Street , Bridge Street Town shared space system

4.2.2 A full description of the routes with potential improvements subject to consultation, feasibility and design are included in Appendix 1 of this report. The action plan in the following sections suggests the key priorities in the development of the aforementioned routes along with the ‘softer’ initiatives to encourage active travel in the area. Figure 4-1 at the end of this chapter shows the extent of the potential Active Travel Network in relation to the Local Plan for Rothesay.

N

0 250m 500m

Rothesay Potential Active Travel Plan Network (Indicative)

Figure 4.1: Proposed Active Travel Network

Key:

- Contra-flow cycling
- Mount Stuart Place to Argyll Place coastal link
- School campus to town centre
- Town centre links (Montague Street /Bridge Street

NOTE: Potential routes shown are indicative and are subject to change as a result of consultation, feasibility and design.

5 Prioritised Action Plan

5.1 The Priorities

5.1.1 This prioritised Active Travel Plan sets out the key potential measures needed to encourage walking and cycling in Rothesay. As well as incorporating parts of the strategic walking and cycling network, it also includes promotion and 'soft' measures which form part of a package of works which have been used successfully in those towns and cities where there has been an increase in sustainable modes.

5.1.2 The following measures are the key priorities for encouraging active travel in Rothesay:

Priority 1: Clear and simple signage for Rothesay

Priority 2: Introduction of contra-flow cycling on Rothesay's one way streets

Priority 3: Montague Street, Bridge Street town centre shared space system

Priority 4: School campus to town centre

5.1.3 Each of these individual priorities are summarised below and form part of the wider Rothesay Active Travel Network outlined in chapter 4

5.2 Priority 1 Recommendation: Clear and simple signage for Rothesay

5.2.1 The study area has a good level of directional signage for pedestrians. Much of the signing has been added to over the years which has resulted in an uncoordinated and worn appearance being common throughout signage in Rothesay.

5.2.2 Rothesay has good provision of footways, so to ensure that these are used to full potential, a strategy to induce signage improvements has been identified as the first priority for the study area. The strategy should aim to establish the locations of existing signage and should determine the appropriate way forward for signage in terms of the following:

- Location
- Brand
- Information
- Physical style

5.2.3 The location of signage is of crucial importance. Information boards and directional signage should be located at key decision points which would include interchange points such as bus access points, ferry terminal and retail areas.

5.2.4 A distinct brand would benefit Rothesay and should adopt a theme which is relevant to the study area. The involvement of school children and the local community would help develop a sense of ownership. New signage would also have to take into account the surrounding environment and not be out of place and so consultation is critical, particularly with the Townscape Heritage Initiative Project Officer and Argyll and Bute's Conservation Officer given that part of Rothesay is identified as a conservation area.

5.2.5 The information displayed on new signs in the study area will be dependant on the location, but should include details such as distances and route destinations which encourage the use of local facilities

5.2.6 The adopted signage strategy will be influenced in relation to the target audience. First and foremost the signage should be aimed at **utility journeys**; however for continuity a

single signage brand should be produced which not only targets utility journeys but should take into consideration aspects of targeting tourist/recreational journeys which are vital for Rothesay's economy. In summary, signage should be clear and simple to aid easy understanding and be fit for purpose.

5.2.7 The recommendations are summarised below in Table 5-1:

Table 5-1: Priority 1 Recommendations Summary Table – Montague Street, Bridge Street Permeability
Description
▪ Provision of a area wide co-ordinated signage strategy
Issues for consideration
▪ Style of signage needs to be developed in line with that of the identified core paths. ▪ Location and positioning of new signage crucial
Recommended Intervention (subject to feasibility and design)
N/A

5.3 Priority 2 Recommendation: Montague Street, Bridge Street town centre shared space system

5.3.1 Montague Street is located in the heart of Rothesay and is one street back from the coastal frontage. The street is a hub for retail and employment opportunities with various stores located along its length. Cars, buses and heavy goods vehicles appear to be a common sight on Montague Street. Argyll and Bute Council state that the loading access times for businesses in Montague Street were altered as a result of a new traffic order published in 2007. Accompanying access restrictions for businesses was the introduction of restricted waiting times for general parking. The order originally intended to improve traffic management and provide more parking for shoppers in Rothesay. Indeed an increased level of parking is available, however this reduces the space for pedestrians and cyclists. Being a central hub for the town it would be unrealistic to completely remove parking, however with a commitment to increase enforcement on delivery vehicles adhering to the 08:00-10:00 restriction, HGV traffic will be reduced at peak shopping times. A reduction in the amount of traffic during the day would make a significant improvement to the aesthetics of the street and in turn would create a safer place for people who wish to linger.

5.3.2 There has been recent investment, with block paving provided along footways and mono-block style paving on the carriageway providing the perception of a shared space along the street and so it would be appropriate to build on the pleasant materials currently used. Pedestrians and cyclists would greatly benefit from Montague Street adopting a shared space system. The principles behind the shared space system are relatively simple with equal priority given to all road users. This results in all road users becoming increasingly aware of other road users.

5.3.3 The shared space system is not a new idea and has been adopted successfully in other parts of the UK. A good example of another seaside town which has adopted this principle is on New Road in Brighton, the results of which according to Brighton and Hove City Council was a 93% reduction in motor traffic and a 162% increase in walking and cycling numbers.

5.3.4 Bridge Street could become a welcome extension to Montague Street, presently due to few gaps in traffic routing along Gallowgate crossing from Montague Street is difficult. The introduction of a raised area which houses a designated crossing facility could greatly assist navigation and provide continuity between the two streets.

5.3.5 The recommendations are summarised below in Table 5-2:

Table 5-2: Priority 2 Recommendations Summary Table – Montague Street, Bridge Street Permeability

Description
▪ Removal of bollards and unnecessary signage to create a shared space environment
Issues for consideration
▪ Public acceptance ▪ Retail owners acceptance ▪ Resulting reduction in traffic flow may increase flows on other town centre streets ▪ Integration with shop front improvements resulting from Townscape Heritage Initiative
Recommended Intervention (subject to feasibility and design)
Montague Street Investigate options to redesignate parking from Montague Street providing a shared space environment Provide attractive safe and secure cycle parking located at convenient and accessible points Provide disabled parking at accessible locations
Bridge Street Investigate options for providing a designated crossing facility between Montague Street and Bridge Street which could include the provision of a raised table at Gallowgate which would assist navigation and provide visual continuity between the two streets. Consider continuing the shared space system onto Bridge Street

0 250m 500m

N

Rothesay Potential Active Travel Plan Network (Indicative)

Figure 5.1: Route 1 - Montague Street, Bridge Street, Tower Street shared space system

Key:

Mount Stuart Place to Argyll Place coastal link

NOTE: Potential routes shown are indicative and are subject to change as a result of consultation, feasibility and design.

1A - Bollards indicate separation of road users which should be removed to create a shared space

1B - Obstructive parking causes difficulties for cyclists and pedestrians travelling along Montague Street

1C - No designated crossing facility causes a barrier for pedestrians

1D - High number of large vehicles affect connectivity through central streets

1E - Enforcement of existing delivery restrictions is not sufficient

5.4 Priority 3 Recommendation: Introduction of contra-flow cycling

5.4.1 Rothesay is a relatively compact settlement with well connected streets and in the central regions is relatively flat, however as identified within chapter 3 of this report, one-way streets limit accessibility by bicycle. There are relatively few barriers to active travel in Rothesay, however as a cyclist other than the terrain surrounding Rothesay's centre, traffic management is a significant barrier. Although quite uncommon in Scotland, contra-flow cycling is gaining in popularity, and often where not permitted cyclists continue to cycle against the flow of traffic.

5.4.2 This option has the potential to greatly increase the permeability of Rothesay's town centre and therefore potentially increase the attractiveness of the bicycle as a mode a travel through Rothesay, particularly as the town centre is a key employment centre in the study area. Allowing contra-flow cycling helps to reduce the barriers as cycle journeys can become shorter and a reduced number of junctions may need to be negotiated.

5.4.3 The introduction of a contra-flow system for cyclists is not a new principle, however historically the principle has been to design in such a way that cycle traffic is fully segregated. The newly published Cycling by Design 2010 suggests that for lightly trafficked one-way streets with flows of less than 1000 AADT and 85%iles speeds of less than 32kph, specific cycle infrastructure is not normally required other than at street entry points.

5.4.4 Consequently in order to define the most appropriate design for Rothesay's one way streets a feasibility study will be required, paying particular regard to traffic flows and 85%ile speeds along the relevant sections. An inclusion of the one-way streets in Rothesay which would benefit from contra-flow cycling has been provided within figure 4.1 – proposed active travel network, as although these will not be designated routes, will still compliment the proposed network.

5.4.5 There are a number of considerations which have to be taken into account including the amendment of traffic regulation orders to reflect priorities for cyclists and whether such a scheme can gain political support. Priority 2 of this report focuses on Montague Street and so during feasibility and design consideration as Montague Street is one-way, contra-flow cycling should be considered if the reintroduction of two-way movements is not feasible.

5.4.6 Both segregated and unsegregated contra-flow cycling is present within Glasgow, and example of segregated contra-flow is shown in figure 5.1 below.

Figure 5.1: Contra-flow cycling in Glasgow (Woodfarm Rd)

5.4.7 An interesting study examining both before and after data at sites in Bristol is highlighted in traffic advisory leaflet (TAL) 6/98 published in September 1998, which showed that there was no statistically significant increases in the numbers of cyclists travelling in the contra-flow direction. The results of this research suggested that a large proportion of the

cyclists who found value in using the route had previously been cycling illegally in the contra-flow direction in these streets. TAL 6/98 suggests that providing a formal agreement to allow cycling illegally in the contra-flow direction might therefore improve conditions for cyclists, and raise awareness of the need to anticipate cyclists in these locations.

5.4.8 The recommendations are summarised below in Table 5-3:

Table 5-3: Priority 3 Recommendations Summary Table – Introduction of contra-flow cycling
Description
• Introduction contra-flow cycling on one way streets within Rothesay
Issues for consideration
• Pilot study would be required to ensure compliance/understanding within Rothesay • Education and awareness raising required • Political support would be required to implement • Potentially expensive to formalise • Street widths would require investigation • Possibility for integration with Townscape Heritage Initiative projects
Recommended Intervention (subject to feasibility and design)
Provision of signage at street entry points Provision of differential colouring Redrafting of TRO to include exemption

5.5 Priority 4 Recommendation: School Campus to Town Centre

5.5.1 A new joint campus was built to the south of Rothesay in 2007 which merged Rothesay Academy and Rothesay Primary. Rothesay Primary's pre five unit and Argyll College are also contained within the campus. The Secondary school element of the campus can cater for up to 1700 pupils, and so is a significant trip generator in the study area. As identified in chapter three of this report the main residential areas in Rothesay are located on steep terrain surrounding the town centre. There are a number of residential properties on low ground in the centre of Rothesay, however the main residential areas are located on steep terrain radiating out from the town centre.

5.5.2 The core problem for the new campus identified during discussions with Argyll and Bute Council Sustainable Travel Officer is that the campus is located outwith the main settlement and approximately 1km south of the town centre. This automatically has implications for accessibility and evidence of financial contributions to improving the surrounding active travel infrastructure is non-existent.

5.5.3 Access to the campus can be taken via High Street which has been identified within Argyll and Bute's Core Paths Plan as a proposed "on-road" core path. This can be instrumental in opening up a wider choice of funding streams to enable improvements along this section of route.

5.5.4 High Street changes in characteristics throughout its length, on approach to the joint campus, the carriageway is narrow and footways are only available on the west side, however on the approach to Victoria Hospital, footways become wider and provision is on both sides of the carriageway. As High Street enters the edge of town centre adjacent to Rothesay Castle it become a one way with traffic permitted to head south only and so vehicular traffic and indeed cyclists are diverted along Castle Street and onto Bishop Street. Along the route, signage is limited, the quality of surfacing materials is poor and general maintenance is required. Parking also appears to be an issue as vehicles mount the footway along narrow sections just south of Victoria Hospital.

5.5.5 Although traffic flow data was not available from Argyll and Bute Council, it is anticipated that traffic flows on this road are not in the regions to require a segregated cycle facility and so cycle traffic is likely to travel on road. Accident data also highlights no road safety concerns along this section of road. To compliment an improvement scheme such as this cycle parking facilities should be provided at convenient locations, such as at the leisure pool and Victoria Hospital.

5.5.6 The recommendations are summarised below in Table 5-4:

Table 5-4: Priority 4 Recommendations Summary Table – School Campus to Town Centre
Description
▪ Provide improved footways and increased permeability between joint campus, Victoria Hospital and town centre
Issues for consideration
▪ Public acceptance ▪ Obtaining funding streams ▪ Traffic growth ▪ Road space between Victoria Hospital and joint campus
Recommended Intervention (subject to feasibility and design)
▪ Provide flush dropped crossings with tactile paving at side roads on High Street ▪ Consider implementation of restricted parking at narrow sections of road ▪ Consider the resurfacing of sections of footway particularly between Ministers Brae and Broadcroft ▪ Investigate options for the construction of a new footway between the joint campus and Victoria Hospital ▪ Implement contra-flow cycling at north end of High Street adjacent to Rothesay Castle (addressed within priority 3)

N

0 250m 500m

Rothesay Potential Active Travel Plan Network (Indicative)

Figure 5.2: Route 2 - High Street links (school campus/hospital)

Key:

High Street links (school campus/hospital)

NOTE: Potential routes shown are indicative and are subject to change as a result of consultation, feasibility and design.

2A - No dropped kerbs as side streets connect with High Street

2B - One way system is a barrier for cyclists

2C - No cycle parking is provided at the leisure pool

2D - Obstructive parking causes permeability issues for pedestrians

2H - Surface quality is poor with accompanying drainage issues

2G - Surfacing on both carriageway and footway is poor

2F - Entrance to Victoria Hospital forces pedestrians onto road

2E - Very limited width on footway causes a pinch point for pedestrians travelling to joint campus

Halcrow

6 Conclusions

6.1.1 Rothesay is not unlike many settlements within Argyll & Bute in that there is a good network of footways and percieved low traffic levels, however travel on foot appears not only the most popular but the most realistic sustainable travel mode. Rothesay centres around a level town centre, with a slight incline westards towards the schools campus and hospital, whilst to the north and south of the settlement there are steep inclines reducing the attractiveness of cycling. A number of cyclists were identified utilising the roads within Rothesay during the audit process, and following consultation with the local bike shop it is evident that the uptake of cycling as a leisure activity increases during tourist seasons.

6.1.2 Inconsistancies with regards signage, the topography and climate all act as barriers to walking & cycling in the study area. Four priorities have been developed which would be best placed to improve the existing infrastructure for both walking & cycling and reduce the barriers to active travel. Whilst it is recognised that utility bicycle trips are not going to gain instant popularlity as a result of infrastructure improvments, the targeted corridors of this study aim to provide a coherent safe network which provides access to facilities and places of employment.

Appendix 1: Rothesay Active Travel Network – Potential Improvements

Route 1 - Montague Street, Bridge Street, Tower Street shared space system

Ref	Street	Start	End	Potential intervention (All subject to feasibility and design)
1A	Montague Street	All		Removal of bollards would improve permeability and through movements whilst promoting the shared space environment.
1B	Montague Street	All		Parking should be carefully managed with short stay provided, this should include monitoring and enforcement of service vehicle access.
1C	Gallowgate	At Bridge Street/Montague Street		Consider the improvements to surfacing which promotes priority for pedestrians with an accompanying crossing facility which fits with the proposed shared space environment.
1D	Montague Street	All		Consider monitoring and enforcement of service vehicle access accompanied by a ban on tour bus access would allow easier passage by pedestrians and cyclists.
1E	Montague Street	All		Intervention as 1D, consideration of the level of monitoring and enforcement would reduce obstructive parking, whilst promotion of the shared space principle should compliment enforcement.

Route 2 – School Campus to Town centre

Ref	Street	Start	End	Potential intervention (All subject to feasibility and design)
2A	High Street	All		Consider dropping a number of kerbs as side streets connect High Street. Kerbs should be flush with carriageway to avoid potential trip hazards and compliment crossing desire lines.
2B	High Street	Guildford Square	Castlehill Street	Priority 3, which identifies a need to allow contra-flow cycling, would reduce the barrier to cycling on this section.
2C	High Street	Adjacent to Eden Drive		Consider the provision of safe and secure cycling parking, preferably covered in an appropriate accessible location.
2D	High Street	South of Victoria Hospital		Consider the use of soft police intervention to remove obstructive parkers.
2E	High Street	Joint Campus	Victoria Hospital	Investigate options to allow a greater allocation of carriageway space for pedestrian footway.
2F	High Street	Entrance to Victoria Hospital		Consider the provision footways with dropped kerbs which allow safe passage by pedestrians.
2G	High Street	Ministers Brae	Church Lane	Provide improvements to surfacing both on the carriageway and footway.
2H	High Street	Ministers Brae	Eden Drive	Improve maintenance regime along this section.

Halcrow Group Limited
Camas House Fairways Business Park Inverness IV2 6AA Scotland
Tel +44 (0)1463 231 707 Fax +44 (0)1463 243 762
www.halcrow.com