# **The Scottish Government**

# Monitoring and Evaluation of the Smarter Choices, Smarter Places Programme

# Going Smarter in Larbert and Stenhousemuir

**Final Report** 

**March 2013** 

Version 3.1







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#### **Executive Summary**

This report describes monitoring and evaluation results for a programme of smarter choices and smarter places investment initiatives in Larbert/Stenhousemuir which encompassed a range of infrastructure and behaviour change measures to encourage more sustainable travel choices.

The programme was successfully delivered and integrated with the development plans in the area, including for a new hospital and new school. Infrastructure measures included a range of path improvements to encourage cycling and walking. Promotion measures included marketing campaigns, travel plan activities and personal travel planning (PTP).

The main observations and conclusions on travel behaviour change are:

- The proportion of all trips made by car as a driver and as a passenger has dropped. This is
  particularly notable when contrasted with the background trend as represented by data
  from the Scottish Household Survey (SHS) for equivalent sized towns over a broadly similar
  timescale where car driving and passenger use fell by a much smaller amount.
- There has been a sharp rise in the proportion of trips made by walking and this has increased over 10 times more than in the comparable SHS locations. This is backed up by an increase reported in self-reported frequency of walking.
- The increase in cycling is approximately in line with the national trend but is not statistically significant.
- Evidence on bus use is mixed. While survey respondents said that in general they were
  making greater use of buses, this was not borne in their recorded behaviour in the travel
  diary.
- Taxi use has risen slightly but significantly.

Physical activity levels fell despite the increase in walking. In 2009 around 36% of the adult population was meeting the national physical activity target but this fell significantly to 24% with a particularly large fall amongst females. Local people highlight the substantial change in the local demographic during the pilot period with changes in the characteristics of the local population which may explain some of the changes in the pilot area.

In terms of changes in attitudes:

- Attitudes towards the car were stable overall. Whilst more people want to reduce their car
  use there are also more people believing there are practical alternatives.
- Changes in attitudes towards bus travel were mixed. More people said they liked travelling
  by bus and there were significant improvement in perceptions of accessibility by bus,
  daytime frequency, feelings of personal security in the evening and the availability of
  information. However perceptions of bus fares deteriorated.
- Positive views of walking facilities, safety and security increased, although there was a
  decrease in personal acceptance of the need to walk more to keep fit.







- Attitudes to cycling improved. More people in 2012 agreed that cyclists can make safer trips and held positive views about facilities for cycling such as cycle lanes and cycle parking.
- Larbert/Stenhousemuir residents appeared slightly more sceptical about environmental issues but conversely more positive towards the need to address environmental concerns.
- More people were concerned about traffic congestion but less people thought that more roads should be built. There was an overall increase in positive attitudes towards the local neighbourhood.

Local awareness of the SCSP programme in the 2012 household survey was good, with 63% of respondents saying that they had heard of the programme. 71% of people recognised the programme logo, and when asked what they thought the campaign was about 65% of respondents said they thought it was about encouraging people to become more active and a similar proportion said they thought it was to do with getting people to use cars less.

There have been positive impacts through reduced travel costs, support for the local economy, better access to local services, community development, reduced emissions, regeneration and road safety.

Key learning points have been that persistence reaps rewards, trust develops over time, working with partners widens influence, and recruiting community champions under a branded campaign helps to sustain delivery.







#### 1.0 Introduction

- 1.1 This report describes the monitoring and evaluation results for a programme of pilot smarter choices smarter places (SCSP) initiatives in Larbert/Stenhousemuir which encompassed a range of infrastructure and behaviour change measures to encourage more sustainable travel choices. This report describes the planning, development, management, delivery and monitoring of a programme of measures to encourage people to adopt travel patterns which aim to save them money, make them healthier, reduce transport emissions and develop more cohesive communities.
- 1.2 This report reviews the period from 2008, when a proposal was made to the Scottish Government for funding, to May 2012 when the latest monitoring data became available. During that period there have been many changes to the approach, specification and delivery of the programme and this report reviews the factors leading to these changes.

#### 1.3 This report:

- Describes the local SCSP programme in Chapter 2
- Discusses in Chapter 3 how the SCSP programme relates to wider changes in the economy, society and transport over the programme period.
- Describes the delivery of the programme of measures (outputs) in Chapter 4 and reports feedback on how well the process of implementing the programme worked
- Presents the evidence on travel behaviour outcomes in Chapter 5.
- Discusses the outcomes related to changes in attitudes to travel and the wider community in Chapter 6.
- Reviews the awareness of SCSP delivery in Chapter 7
- Discusses the potential impacts in different policy areas resulting from the changes in travel behaviour in Chapter 8
- Reviews the specific learning points in Chapter 9.







# 2.0 Summary of Initiatives and Costs

2.1 Table 2.1 summarises the initiatives, costs and dates of delivery. The total funding made available to Falkirk Council has been £1.68 million, of which £949k was from the Scottish Government.

Table 2.1 – Larbert/Stenhousemuir Initiatives

| Category                            | Initiatives delivered   | Start and End dates                      | Outturn<br>Costs |
|-------------------------------------|---|--|------------------|
| Provision                           |   |  |                  |
| Public transport provision          | No public transport improvements but PT marketed under PTP  |  |                  |
| Infrastructure provision            | Infrastructure Improvements (Key Links) Cycle Storage and Community Facilities Signage  | May 2009 –<br>March 2012                 | £401,643         |
| Promotion                           |   |  |                  |
| Car and lift sharing                | No new scheme set up but existing scheme promoted under PTP   | May 2009 –<br>March 2012                 |                  |
| Campaigns                           | Mass Marketing and Promotional Campaign Public Transport Promotions Car Sharing Promotion   | March 2009 to<br>March 2012 <sup>1</sup> | £599,636         |
| Travel planning                     | Welcome Packs for New Residents Business Travel Plan Network Walk to School Projects Sustainable Community Champions Transition Projects  | March 2009 –<br>March 2012               | £47, 270         |
| Personal travel planning            | Personal Travel Planning  | May 2009 –<br>March 2012                 | £320,530         |
| Cycling Promotion/<br>Interventions | Cycling Promotion/Interventions   | May 2009 –<br>Present                    | £17,591          |
| General active travel promotion     | Health Walks  | May 2009 to<br>June 2012                 | £26,783          |
| Travel information                  | Pedestrian and Cycle Counters<br>Website  | May 2008 –<br>Present                    | £80,000          |
| Training and events                 | Cycle Training is reported under Cycle promotion and cannot easily be separated out. Other events are included under active travel promotion and cannot easily be separated out |  |                  |
| Management and organisation         | External Consultancy Support related to managerial support and not directly attributable to project delivery or material goods  | March 2008<br>March 2012                 | £187,300         |

2.2 The project launched in May 2009 and a mass marketing campaign saw the Take the Right Route (TtRR) branding used in a number of locations around the town, including in

<sup>&</sup>lt;sup>1</sup> These programmes are funded until March 2013 and the costs for May 2012 until March 2013 are not available separately







advertisements on buses and on wraps around cycle shelters. Infrastructure works began in 2009 and continued to the end of the funding period. The initiatives proceeded as planned, with the exception of:

- The website, which has been implemented through the Council's website rather than as a stand-alone site. This was due to a Council policy not to develop websites independently of the main Council one.
- The Walk and Cycle to Work Buddies scheme, which was not progressed due to insufficient interest from local businesses.
- 2.3 Falkirk Council extended the funding of the campaign until March 2013 including a further Mass Marketing and Promotional Campaign (LS6) and further Travel Planning initiatives. Funding from 2011/12 allowed 'wrapping' three service buses in 'Take the Right Route' branding. The buses cover the Larbert and Stenhousemuir area, central Falkirk and Grangemouth.
- 2.4 The Mill Lade is an extensive stretch of woodland paths to the south of Larbert and Stenhousemuir. Central Scotland Forestry Trust has been investing in this since 2008 so the SCSP investment has complemented this. The funding for this path network came from Falkirk Council, SCSP funding and Falkirk Environment Trust.
- 2.5 Figure 2.1 shows the locations of the infrastructure improvements. Improved paths are the Inches Right of Way path with cycle link connecting to NCN 76, the Howburn path and the Mill Lade path. New cycle storage facilities are at Larbert Rail Station, Larbert Village Primary School, Ladeside Primary School, Stenhousemuir Football Club, Stenhousemuir Primary School, Larbert High School, the Falkirk Council office on Main Street, Stenhousemuir Sports Centre and Kinnaird Primary School.







Legend Cycle Storage Locations 1 - Kinnaird Primary School 2 - Stenhousemuir Football Club 3 - Stenhousemuir Primary Club 4 - ASDA & Falkirk Council Office 5 - Larbert High School 6 - Stenhousemuir Sports Centre 7 - Ladeside Primary School 8 - Larbert Village Primary School 9 - Larbert Railway Station Infrastructure Improvements A - Inches Right of Way Path B - Howburn Path C - Mill Lade Path Intervention area boundary

Figure 2.1 – Initiatives Locations Map







# 3.0 Background to the Programme and Parallel Activity

#### **Previous activity**

- 3.1 The rationale for Falkirk Council selecting Larbert/Stenhousemuir as its priority for Smarter Choices Smarter Places activity and investment, partly arose from several notable developments in the area:
  - Town Centre Regeneration (2007-2010) This incorporated a new ASDA supermarket, Library, Health Centre and small retail outlets. The regeneration works included transport interventions including, car parks, junction improvements, bus stops, cycle parking and pedestrian crossing facilities along King Street and Main Street, Stenhousemuir.
  - Since 2000 there has been extensive housing and other developments in the Larbert and Stenhousemuir area. The increase in housing created an increase in car traffic.
     A new school, Kinnaird Primary School, opened in 2008 to service the new development.
  - In terms of promotion activity in the area, 3 of the 4 local primary schools took part in Walk to School campaigns every year before Take the Right Route (TtRR). All 4 primary schools now took part in the SCSP programme.

#### Parallel activity to SCSP 2009-2012

- 3.3 As part of the New Forth Valley Royal Hospital development, a variety of transport interventions were put in place (Phase 1 July 2011, Phase 2 July 2012); in the form of junction improvements, crossing points, road improvements, footway improvements, bus services, cycle lining and strategic pedestrian signage throughout the Larbert, Stenhousemuir and Carron areas.
- 3.4 Additional path works have also been constructed alongside the SCSP investment. Falkirk Council constructed an additional link from Burns Ave to the National Cycle Network (NCN) Route 76 which was completed in 2011.
- 3.5 A new school, St Bernadette's RC Primary School, with a capacity of 190 pupils was built within Larbert in 2012 with improved footways, traffic calming and signage as part of the development.





# 4.0 Outputs from SCSP Delivery

#### **New Infrastructure**

- 4.1 Improvements were made to the path network to provide new attractive walking and cycling routes. Howburn path was completed in May 2009, the Inches Public Right of Way in 2010 and works on Mill Lade started in 2011. The Millade is an extensive stretch of woodland paths to the south of Larbert and Stenhousemuir and the Howburn Path leads to this area. The project has been developed in partnership with Central Scotland Forestry Trust between 2008 and 2012.
- 4.2 The new Forth Valley Royal Hospital development completed woodland paths within the hospital grounds during 2012.
- 4.3 The new St Bernadette's RC Primary school completion includes improved footways and traffic calming; the scope for a higher specification cycle/footways was limited.

#### Signage

4.4 New signs were installed on the path network in October 2010 with 36 signs placed at strategic locations. 67% of participants of Walk and Talk in 2012 (see below) rated the signage as excellent or good.

#### Mass Marketing, Promotional Campaign and Events

- 4.5 The campaign centred around the use of the Take the Right Route brand with special pages on the Council website being set up to support this.
- 4.6 Bus advertisements were placed on First services 10, 11 and 12 between 2009 and 2011. Flyers were distributed to all households in July 2010 and March 2011 and the Council purchased media space to continue the campaign into 2012. Three buses were wrapped with the Take the Right Route brand, and these wraps will last for three to four years.
- 4.7 Cycle shelters at schools, and cycle lockers at Larbert station, were wrapped in the Take the Right Route branding.
- 4.8 Public transport promotions involved First ScotRail issuing timetables and 500 vouchers through the PTP and FirstBus also issued timetables for local services and complimentary tickets.
- 4.9 Over 800 people attended the launch event in Stenhousemuir and a Take the Right Route Birthday Event was held in Stenhousemuir Town Centre in June 2010 with an attendance of between 1,000 and 1,500.







#### **Personal Travel Planning**

- 4.10 During the two years when the PTP initiative was delivered in May 2009 and May 2010 there have been 1,548 people signed up as Take the Right Route members and 150 of these were recruited as Take the Right Route champions to promote the initiative.
- 4.11 The PTP enabled the Council to deliver engagement with local people across a broad range of functions covering: information provision, public participation and feedback, on-going project monitoring, travel data collection, and recruitment of local champions. The first phase of this dialogue was undertaken in 2009 and the second phase in 2010 sought to revisit the same 8,309 target households recording changes made since Phase 1 of the initiative. Monitoring of phase 2 was carried out 4-8 weeks following intervention.
- 4.12 The consultants delivering the PTP (MVA) employed a team of 10 temporary Travel Advisors to deliver the door-to-door PTP service to all households within the target area. A total of 7,351 households were contacted (92% of all eligible households in the area), with 4,707 households participating in at least one phase of PTP. This equates to 59% of households in the target area getting actively involved in PTP. A summary of the outcome of the PTP initiative is shown in Table 4.1.

Table 4.1 – Reported PTP Delivery and Dialogue

|                                  | Interim Results, 2009 | Final Results, 2010      | Total over 2 yrs  |
|----------------------------------|-----------------------|--------------------------|-------------------|
|                                  | (at end of year 1)    | (at end of project)      |                   |
| Total no. eligible households    | 7,756                 | 7,996                    | 7,996             |
| No. households contacted         | 5,843                 | 6,182                    | 7,351             |
| (% of eligible households)       | (75%)                 | (77%)                    | (92%)             |
| No. interested participants      | 2,982                 | 3,425                    | 4,707             |
| (% of those contacted)           | (51%)                 | (55%)                    | (64%)             |
| No. of members                   | 599 TtRR members      | 949 TtRR members         | 1,548 members     |
| No. of champions                 | 39 TtRR champions     | 111 TtRR champions       | 150 champions     |
| Change – reported positive       | n/a                   | 815                      | 27-31% of         |
| change in behaviour              |                       | (24%)                    | participants (16- |
|                                  |                       |                          | 18% of target     |
|                                  |                       |                          | households)       |
| Information and materials        | 3,536 households      | 2,571 households         |                   |
| provided                         | received material     | received material        | 27,000            |
|                                  |                       |                          | materials         |
|                                  | 14,824 information    | 11,557 information       | delivered         |
|                                  | materials delivered   | materials delivered      |                   |
| No. incentives / gifts delivered | 1,961                 | 2,742                    | 4,703             |
| No. clinics delivered            | 10                    | 12 (3 additional clinics | 25 (of which 22   |
|                                  |                       | with NHS Forth Valley    | completed to      |
|                                  |                       | planned for              | date, involving   |
|                                  |                       | Spring/Summer 2011)      | an additional     |
|                                  |                       |                          | 364               |
|                                  |                       |                          | participants)     |





- 4.13 24% of participants reported that they had changed their travel behaviour towards more active and sustainable options.
- 4.14 Through feedback from PTP participants, the project explored motivations for peoples' choices and what they would like to see changed to improve their local area. The main motivations for travel behaviour were cost and health in both 2009 and 2010. The main barriers to walking, cycling and public transport were:
  - Walking: The main issues affecting whether or not people walk were consistent over the 2 years, with the quality of the environment being the major factor, in particular dog mess, path quality and road crossings.
  - Cycling: The quality and number of safe routes, including off-road routes, appears to be important in influencing cycling levels.
  - Public transport: Expense and reliability of buses and trains were consistently identified as issues affecting whether people choose to use public transport.
- 4.15 A monitoring exercise was carried out, independently of the delivery team, following the PTP initiative. This surveyed a representative sample consisting of 282 year 2 PTP participants. Of these respondents, the majority stated that the information they had received during PTP was helpful in addressing their motivations, in particular the information relating to health and cost of travel. Most respondents felt that the number of visits from Travel Advisors was about right (94%), and the majority (87%) felt the experience was good or excellent.
- 4.16 Welcome packs for new residents were supplied by travel advisors to all newly occupied homes in the target area. In addition 49 welcome packs were delivered to unoccupied, yet completed, new homes.

#### **Cycle Promotion**

- 4.17 Various cycling initiatives were trialled:
  - In 2009 and 2010 family cycle training and a cycle mechanic course were offered, however take up of these was low and after promoting these for some time a decision was taken not to proceed further with these.
  - Guided cycle rides were also trialled. These continue to be developed on a wider basis across the Falkirk area.
  - Working with Larbert High School, a "Try Cycling" project was developed. In 2012 it
    is in its third year, and is successfully offering opportunities for S1 students to try a
    variety of cycling activities, including an introduction to mountain bike skills. The
    initiative also encourages cycling to school and as a leisure activity. To date, over







600 S1 students have taken part in "Try Cycling", and the project formed a central part of the school's successful application to become Scotland's first Cycle Friendly Secondary School.

- The Children's Bike Club was developed as a pilot project as a partnership between the Falkirk Council and NHS Forth Valley Occupational Therapy Unit (OTU). The project engaged with children registered with the OTU who were in need of support with learning difficulties and autistic spectrum disorders. It enabled children previously excluded from cycling related activities to be able to participate more fully. The project also involved parents in the process of training, upskilling them in training techniques which could be applied to other challenges.
- Cycle storage of varying types was installed at schools, Larbert Library, Stenhousemuir Town Centre, Ochilview Stadium, Larbert Station and Stenhousemuir Sports Centre. As part of the installation, all of the storage was vinyl wrapped with Take the Right Route branding to a custom design. The Council reports that they have had informal positive feedback, with parking demand levels at Larbert Station now in excess of parking supply, and schools reporting increased levels of cycling to school.
- 4.18 In total 196 cycle parking spaces were made available in Larbert and Stenhousemuir along with 100 scooter parking places in local schools.
- 4.19 The wrapping of the cycle lockers improved their use. At Larbert station prior to being wrapped, 9 of the 23 lockers were been let to members of the public. Within a couple months of being branded, 8 additional lockers were let.
- 4.20 The Children's Bike Club was particularly successful. The children were aged between 9 and 12, and all were, at the start of the course, unable to ride a bike. Through a 21 stage process, with intensive support both for the parent/s and the child, with each progressing at their own pace, the children advanced through the stages towards being able to ride unassisted. Positive feedback from users included:
  - "...Much more confidence in all sorts of ways. Now willing to learn to swim and even join the Scouts"
  - "One of the best things Ethan has ever done. Thank you so much"
  - "(My son) ...now seems to attempt new challenging tasks with a positive attitude because he has conquered this one"
  - "I am very proud of myself for riding my bike"
  - "Being able to ride his bike has given Dylan more confidence and has allowed him to join in with his friends when they choose to go out on their bikes"







- "The therapists/trainer were fantastic and the 100% success rate of all 4 group members showed this"
- "I loved everything about the bike group"
- 4.21 This project was mainstreamed within the Council and is run over Easter and Summer holiday periods. It was oversubscribed for 2012 and is part of the core cycle training offer from the Council.
- 4.22 The cycle training offered also included Bikeability Levels 1 and 2, commuter cycle training for adults / Council staff / local businesses and short courses in cycle maintenance run by Dawson Bike Club.
- 4.23 SCSP allowed Falkirk Council to trial a number of cycling initiatives which met with varying success. Initiatives such as the Children's Bike Club and Try Cycling Events were successful. The offer of formalised training in bike maintenance and family based cycle training is being tried in other ways through less formalised and community driven projects and these are reported to be attracting better take up.

#### **Active Travel Events**

- 4.24 The health promotion organisation Braveheart ran a weekly walk in the Larbert and Stenhousemuir area, attracting around 20 regular walkers to each session. In conjunction with Stenhousemuir Football Club and Take the Right Route, a new weekly Braveheart-led health walk was developed from April 2011.
- 4.25 A mass participation walking event "Walk and Talk", has been held in conjunction with Stenhousemuir Football Club in June 2011 and June 2012. In 2011, the event held a sponsored walk in aid of Strathcarron Hospice, and was partly promoted via the PTP database.
- 4.26 The 2011 event attracted 150 participants, plus a separate nursery walk with 80 pupils. The walk was publicised as a fundraising event for Strathcarron Hospice. In 2012 the event attracted 165 participants. In 2011 88 volunteers assisted with the organisation of the event and 65 volunteered in 2012. Volunteers came mainly from community groups including uniformed groups (Cadets, Girl Guides) and from Larbert High School.
- 4.27 As part of the Walk the Talk events new circular 5km and 10km routes were planned and marked to showcase the new opportunities for walking/cycling as a result of the recent path improvements which had been constructed. These included the paths at the New Forth Valley Hospital Development and the pedestrian signage. The walks also took in the new town centre development to ensure participants could experience the high quality walking routes to local shopping.





#### Media, Public Relations and Joint Working

- 4.28 Welcome packs were distributed to complete but unoccupied new homes, resulting in 49 packs being issued. No specific monitoring activity has been undertaken to establish how useful residents found the welcome pack.
- 4.29 A "Walk the Block" leaflet, detailing four self-guided routes in the area, was developed by Take the Right Route in conjunction with Stenhousemuir Football Club and Braveheart. 3,000 leaflets were printed for distribution by the football club to parents and children attending various training sessions.

#### School travel planning

- 4.30 All four primary schools in the project area have taken part in Walk to School activities, with 1,393 pupils involved in this programme. In 2009/10, 4,200 pieces of information were distributed regarding the activities.
- 4.31 Kinnaird Primary School and Larbert Village Primary School ran 8 walking buses between them. Kinnaird Primary ran 3, with 150 participants in May 2009, 180 in October 2009 and 153 in 2010. Larbert Village held 5 walking buses, with 60 participants in October 2009, 59 in 2010, 75 in May 2011, 65 October 2011 and 80 in May 2012.
- 4.32 Falkirk Council's School Travel Plan pack was re-launched to the four primary schools and one high school in the target area and has been given the Take the Right Route branding. The pack contained a simplified checklist of projects linked to an Awards Scheme. Schools could work towards Bronze, Silver, Gold and Platinum travel plan awards based on their level of activity relating to school travel. Kinnaird Primary achieved a Silver School Travel Plan Award in February 2011. Larbert High School became the first secondary school in the Falkirk Council area to achieve a School Travel Plan Award, with a Bronze Award in February 2011.
- 4.33 In May 2010, 7 pupils from local primary schools who were due to start at Larbert High School in August 2010 took part in the transition project. 200 pupils were involved in cycling promotion events including bike security, skill development, cycling to school and usage of the cycle storage provided at schools. Cycling at Larbert High School rose from around 1 or 2 children per day to 15 regular cyclers. Larbert High 'Try Cycling' had at least 200 S1 pupils participating in it per year, resulting in 600 S1 pupils participating during the programme. This activity, plus the cycle storage facilities, led to Larbert High school becoming the first high school in Scotland to achieve Cycling Scotland's 'Cycle Friendly School Award'.

#### **Business Travel Planning**

4.34 Sustained marketing aimed at businesses began in September 2010 in order to establish and challenge the cause of the apparent lack of initial interest when businesses had





- previously been contacted by the Travel Plan officer. The SCSP programme sought to give a new push to travel planning.
- 4.35 Businesses received a marketing pack with promotional items, and 6 local businesses offered to display A3 advertising signage in corridors, staff rooms and stair wells to enable the project to reach this audience. Forth Valley NHS and Asda held PTP clinics for their staff as part of their involvement in the scheme. In initial years 33 employees from Asda and the Forth Valley Royal Hospital participated, enabling the project group to discuss local travel options with them.
- 4.36 In 2012 a series of travel clinics in local businesses took place. In March 2012 a Travel Clinic was held in Forth Valley NHS where over 100 staff participated.
- 4.37 The bus services to the new Hospital are largely funded by Forth Valley NHS and patronage has been growing on these. As income grows on the services the level of support from the hospital falls (under the Section 75 agreement). The obligation on the Hospital is to secure the bus services, and if the cost of support falls as the income from fares increases then there is no net increase in investment in the bus services.
- 4.38 Other businesses have continued to hold clinics and support travel planning including CalaChem and Inneos. This has included the development of a Business Travel Plan web portal. Additionally, 7 community based PTP clinics were held between February and March 2012 expanding the PTP from Larbert and Stenhousemuir to Grangemouth.

# Car/liftsharing scheme

- 4.39 TripShare Falkirk was promoted through the PTP programme, with 1,265 leaflets having been issued for Liftshare. Tripshare Falkirk reached a total of 267 members by June 2012. It is estimated that 255 journeys were made through the scheme since it was launched. There was no discernible increase in Tripshare membership as a result of additional promotion through household PTP, although the number of contacts made through the website during the pilot period substantially increased.
- 4.40 Promotion of Tripshare Falkirk was extended into Grangemouth where there is a high concentration of business activity, and there are plans to further develop its promotion.
- 4.41 Only seven instances of people actually sharing lifts in cars have been identified. However the number of shares is potentially much higher than this since not all members update their status, and once the contact had been established and lift sharing possibly has taken place without being registered. People may also continue to share lifts after making initial contact without registering these trips in the scheme. Additionally, the total number of members does not include 112 members that have left the scheme, either by their own choice or been de-activated due to prolonged inactivity.







Table 4.2 -Liftsharing activity by year

| Year  | Sum of        | Sum of Number of | Sum of Number |
|-------|---------------|------------------|---------------|
|       | Registrations | contacts         | sharing       |
| 2003  | 17            |                  |               |
| 2004  | 2             |                  |               |
| 2005  | 21            |                  |               |
| 2006  | 69            | 6                |               |
| 2007  | 36            | 8                | 1             |
| 2008  | 36            | 19               |               |
| 2009  | 18            | 12               |               |
| 2010  | 13            | 46               | 3             |
| 2011  | 42            | 80               | 3             |
| 2012  | 28            | 110              | 3             |
| Total | 282           | 281              | 10            |

#### Processes for Change Evident from SCSP Delivery

- 4.42 Two focus groups were undertaken in the area to explore how local people perceived the recent changes. The focus groups included research to obtain unprompted feedback on the changes and also prompted responses on how people had reacted to each element of the recent investment.
- 4.43 With extensive housing development and a new hospital in the area, the increase in road traffic was seen to be a problem which had made the benefits of the new off road paths particularly welcome. People had found out about these from various sources including the PTP programme.
- 4.44 People noted that part of the reason why the area was being developed was its good transport links by road and rail.

"It's always been one of the best things about living here, you're right in the centre of the country, there are three international airports within an hour's drive, you can be anywhere in three hours... it's always been a great place for going somewhere else!"

4.1 The investment in the paths was viewed as being something positive for the area as compensation for the extra traffic encouraging more walking and cycling.

"I walk with the dogs... there are new ash paths...there's the canal as well, they've made a big difference to those paths"

"There's a lot more people walking."

4.2 However people remained concerned about the safety of walking and cycling given the increases in traffic.



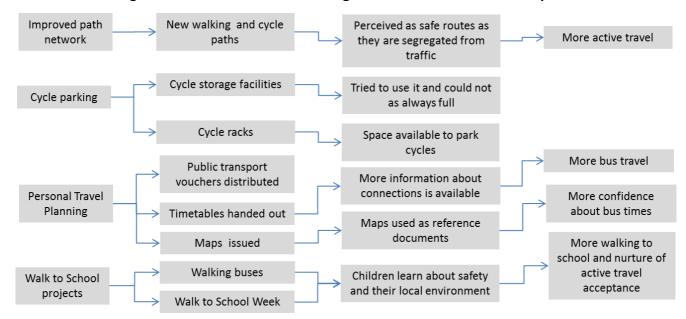




"If you want to get me on a bike, to cycle to Falkirk, I'd want to be separate from the traffic. And I wouldn't let my grandweans do it."

- 4.3 When prompted with the effects of the PTP, people had welcomed the opportunity to provide feedback to the Council.
  - "...... I just wanted a chance to rant about the buses!"
- 4.4 People noted that material they has been given was useful.
- "....the maps, for example. I've got the whole stock of bus timetables for when I want to visit somewhere I don't usually go"
- 4.5 The focus group findings are reported in detail separately but Figure 4.1 summarises the main mechanisms identified by participants where the SCSP investment was perceived to impact on the area.

Figure 4.1 – Mechanisms for Change Identified from Focus Groups









#### 5.0 Travel Behaviour Outcomes

#### Household travel survey

- One of the main sources of evidence on changes in travel behaviour across the local target area was the "before and after" household travel survey. Household surveys were undertaken in 2009, before the start of the SCSP interventions, and in 2012 after completion of the programme. These included a detailed travel diary and questions about travel attitudes and behaviour.
- 5.2 The changes observed in the target area were also compared with the changes recorded in equivalent sized settlements in the Scottish Household Survey between 2008 and 2011. This helped place the results in context and gave an indication of how they compared with "background trends".
- 5.3 The main results from analysis of the travel diaries and the remainder of the household survey are set out below. In reading these, it is worth noting the following:
  - The household survey was undertaken using random sampling across the target area for the SCSP interventions, as defined by the local authority concerned. Changes observed are therefore area-wide and may not pick up more localised responses to specific small-scale interventions, which may be apparent from other local data collection sources.
  - Prior to analysis it was necessary to weight the sample data to achieve samples
    which were broadly representative of the population in the town. All figures quoted
    are based on weighted data analysis, with weightings by age and gender calculated
    according to 2010 mid-term Census estimates for age and gender for the target
    area.
  - Statistical significance tests were conducted on the main results cited, and statistically significant changes at the 95% confidence level are highlighted below. However, it should be recognised that lack of statistical significance does not necessarily mean that there is no change within the population of interest merely that we cannot say with 95% confidence that there has been a change within the population given the size of observed change in the sample and the sample size.

# Household survey sample characteristics

5.4 The survey was completed by 1362 Larbert/Stenhousemuir respondents in 2009 and 1045 in 2012. However, not all respondents provided valid answers to every question so the numbers of valid responses vary according to the aspect being analysed. The "n" figures reported under the graphs in the following sections are the weighted sample sizes – either in terms of numbers of respondents or numbers of reported trips.





5.5 Table 5.1 shows the key characteristics of the achieved weighted Larbert/Stenhousemuir sample in 2009 and in 2012. As age and gender were used to weight the sample, these characteristics are identical in the pre- and post-intervention surveys.

Table 5.1 Weighted sample characteristics (% of total) Larbert/Stenhousemuir in 2009 and 2012

|                                    | 2009 sample<br>(%) | 2012 sample (%) | Population<br>(where available, |
|------------------------------------|--------------------|-----------------|---------------------------------|
|                                    |                    |                 | see note) (%)                   |
| Gender                             |                    |                 |                                 |
| Male                               | 47.7               | No change (due  | 47.6                            |
| Female                             | 52.3               | to weighting)   | 52.4                            |
| Age                                | 12.2               | No change (due  | 12.2                            |
| 16-24 years                        | 12.2               | to weighting)   | 12.2                            |
| 25-34 years                        | 18.7               |                 | 18.7                            |
| 35-44 years                        | 18.1               |                 | 18.2                            |
| 45-54 years                        | 20.9               |                 | 20.8                            |
| 55-64 years                        | 10.2               |                 | 10.1                            |
| 65-74 years                        | 7.7                |                 | 7.8                             |
| 75+                                |                    |                 |                                 |
| Economic Status*                   |                    |                 |                                 |
| Employed Full Time + Self-employed | 38.6               | 34.0            | 45.0                            |
| Employed Part Time                 | 12.6               | 9.1             |                                 |
| Not employed                       | 48.0               | 56.7            |                                 |
|                                    |                    |                 |                                 |
|                                    |                    |                 |                                 |
| Household composition*             |                    |                 |                                 |
| Adults living as a couple/ married | 74.5               | 69.6            |                                 |
| House-share                        | 2.3                | 2.5             |                                 |
| Single Adult household             | 22.8               | 27.9            |                                 |
| Other                              | 0.4                | 0.0             |                                 |
| Presence of Children               |                    |                 |                                 |
| With children                      |                    |                 |                                 |
| Without children                   | 72.9               | 74.1            |                                 |
| Illness and Disability             |                    |                 |                                 |
| With                               | 15.6               | 13.4            |                                 |
| Without                            | 84.4               | 86.6            |                                 |
| Household income (annual, gross)*  |                    |                 |                                 |
| Less than £14,999                  | 43.4               | 52.4            |                                 |
| £15k - £19,999                     | 12.3               | 15.8            |                                 |
| £19k - £29,999                     | 15.8               | 20.1            |                                 |
| £30k - £39,999                     | 11.1               | 7.0             |                                 |
| £40k – 59,999                      | 13.6               | 3.3             |                                 |
| £60k or more                       | 3.9                | 1.4             |                                 |
| [Refused/ missing]                 | [54]               | [66]            |                                 |





| Education*                               |      |      |      |
|--|------|------|------|
| No Qualifications                        | 32.6 | 21.8 | 28.0 |
| School leaving certificate               | 10.5 | 12.7 |      |
| O Grade, Standard Grade, GNVQ equivalent | 28.3 | 34.0 |      |
| Higher, A Level or equivalent            | 9.6  | 15.8 |      |
| Degree/Professional                      | 19.1 | 15.7 |      |
| Ethnicity                                |      |      |      |
| White                                    | 99.1 | 99.4 |      |
| Asian                                    | 0.7  | 0.4  |      |
| Black                                    | 0.1  | 0.0  |      |
| Mixed                                    | 0.1  | 0.0  |      |
| Other                                    | 0.0  | 0.0  |      |
| Household car ownership*                 |      |      |      |
| None                                     | 23.9 | 44.5 | 23.1 |
| 1  | 48.3 | 42.0 |      |
| 2  | 23.9 | 12.1 |      |
| 3 or more                                | 3.8  | 1.4  |      |
| Driving licence*                         |      |      |      |
| Yes                                      | 67.5 | 49.2 |      |
| No                                       | 32.5 | 50.8 |      |
| Adult bicycle ownership* <sup>2</sup>    |      |      |      |
| None                                     | 63.8 | 77.0 |      |
| One                                      | 16.7 | 14.2 |      |
| Two                                      | 13.8 | 7.2  |      |
| Three or more                            | 5.7  | 1.6  |      |
| Children bicycle ownership               |      |      |      |
| None                                     | n/a  | 84.5 |      |
| One                                      |      | 7.5  |      |
| Two                                      |      | 5.7  |      |
| Three or more                            |      | 2.3  |      |
| Concessionary travel passholder          |      |      |      |
| Yes                                      | 28.1 | 26.8 |      |
| No                                       | 71.9 | 73.2 |      |
|  |      |      |      |

Differences between 2009 and 2012 proportions are significant at p<0.05 for those characteristics marked with \*. Differences in bicycle ownership figures should be viewed with caution due to the inclusion of an additional question on child bike ownership in the 2012 survey. For population data, for age and gender, mid-year population forecasts for 2010 are shown, as provided to the research team by the GRO. For other demographics, 2001 Census figures are shown (where available) as the most recent data available at the pilot area level. These should be treated as illustrative only, and are not directly comparable with the sample data because of their age.

5.6 There were some differences between the 2009 and 2012 survey samples. One possible explanation for this is that the non-response biases using the modified 2012 survey methodology were different to those in the 2009 survey. In particular, there was a higher proportion of respondents from households without a car in the 2012 survey sample than

<sup>2</sup> Note that in 2009 the questionnaire only included a question about 'adult' bikes but in 2012 a question was added about 'children's' bikes. This change in questioning is likely to be the cause of at least some of the apparent drop in adult cycle ownership between the two years as it is possible that, in 2009, respondents included at least some child bikes in their adult total.

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in the corresponding 2009 survey sample. The research team was mindful of this in the analysis, and where possible undertook separate behavioural change analyses for people from car-owning and non-car-owning households. However, this potential source of bias should be borne in mind when reviewing the analyses on the overall aggregated samples.

#### Modal split of journeys from the Travel Diaries

#### **Observed changes**

purpose, age categories etc

5.7 The travel diary element of the household survey recorded trip-making behaviour on a specific day<sup>3</sup>. Figure 5.1 shows the changes in mode choice by residents of Larbert/Stenhousemuir between 2009 and 2012 based on the share of all journeys made by main mode. The main mode of travel is defined as the mode used to travel the furthest distance in cases where a journey was conducted over more than one stage.

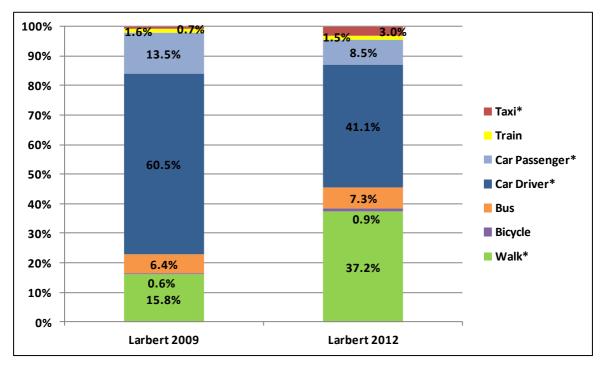


Figure 5.1: Comparison of mode choice by % of journeys made (main mode only)

Travel Diary samples of N = 2,230, weighted for 2009 and N = 1,806 for 2012. Differences between 2009 and 2012 proportions are significant at p<0.05 for all modes marked with \*

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<sup>&</sup>lt;sup>3</sup> Note that the analysis of the travel diary data concentrates on mode share relating to the proportion of all trips by main mode. Average number of trips and trip distances are not reported for two reasons (i) there was a change in the overall number of trips reported in 2009 and 2012 likely to be due to better prompting of respondents to list each trip and trip stage so this means that the reported distances are misleading (ii) there are very few statistically significant changes in average distance between 2009 and 2012 when the sample is divided into sub-samples such as journey

- 5.8 The largest increase in modal split occurred in the proportion of journeys made by foot which rose to 37.2% in 2012. The greatest decrease observed was 19.4 percentage points to 41.1% in the modal split of journeys by car driver.
- 5.9 The increases of 21.4 and 2.3 percentage points for walking and taxi journeys were found to be significant. Significant decreases were identified between the proportions of respondents making journeys as car driver and car passenger.

#### **Comparison with Scottish Household Survey Data**

- A comparison between the modal choices of respondents from Larbert/Stenhousemuir 5.10 between 2009 and 2012 and the percentage point change in share of journeys by each mode from the equivalent sized settlement in the Scottish Household Survey is shown in Table  $5.2^4$ .
- 5.11 The changes in the mode share for walking and car use are quite different from the "background trends" as represented by the SHS data. Whilst there was a small increase in walking trips recorded in the SHS comparison locations (+1.6 percentage points), the increase was 13 times greater in Larbert/Stenhousemuir (+21.4 percentage points). Similarly, whilst car driving reduced in the comparison locations by 1.5 percentage points, the equivalent reduction in Larbert/Stenhousemuir was much greater at 19.4 percentage points. Car use as a passenger reduced in Larbert/Stenhousemuir a smaller decline in the national trend in equivalent sized settlements.

<sup>&</sup>lt;sup>4</sup> Both sets of figures are based on the mode used for the longest (in distance) stage of a journey. However, it should be noted that the SHS data applies to the years 2008 – 2011, whereas the SCSP data covers 2009 – 2012.





Table 5.2 - Comparison of mode share by number of journeys made (main mode only) between Larbert/Stenhousemuir and SHS data between 2008/2009 and 2011/2012

|               | %-point change in Mode Share of Journeys |                     |  |  |  |  |  |  |
|---------------|--|---------------------|--|--|--|--|--|--|
| Mode          | Larbert/Stenhousemuir<br>2009 - 2012     | SHS 2008 - 2011     |  |  |  |  |  |  |
| Walk          | +21.4*                                   | +1.6                |  |  |  |  |  |  |
| Bicycle       | +0.4                                     | +0.5                |  |  |  |  |  |  |
| Bus           | +0.8                                     | +0.1                |  |  |  |  |  |  |
| Car Driver    | -19.4*                                   | -1.5                |  |  |  |  |  |  |
| Car Passenger | -5.0*                                    | -1.5                |  |  |  |  |  |  |
| Train         | -0.1                                     | +0.9                |  |  |  |  |  |  |
| Motorbike     | +0.2                                     | included in 'other' |  |  |  |  |  |  |
| Taxi          | +2.3*                                    | -0.3                |  |  |  |  |  |  |
| Other mode    | +0.6                                     | +0.1                |  |  |  |  |  |  |

Differences between 2009 and 2012 proportions in SCSP data are significant at p<0.05 for all modes marked with \*.

### Modal split of journeys by gender

- 5.12 Figure 5.2 details the changes in mode choice by Larbert/Stenhousemuir residents between 2009 and 2012 based on the share of all journeys made by main mode disaggregated by gender.
- 5.13 The proportion of male walking journeys rose by more than for females. For males the increase was by 25.6 percentage points to 37.6% compared with 18.0 percentage points to 36.9% for females. Although in 2012 males still drive more than females, they walk as much as females. The fall in modal split for driving was significant for both male and female car drivers, and in the proportion of female car passengers.







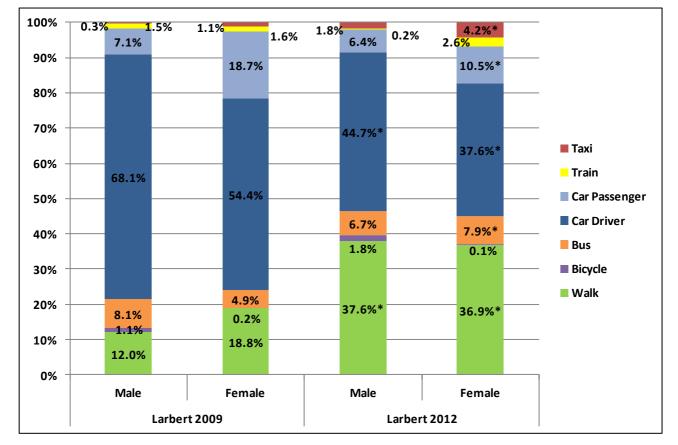


Figure 5.2: Comparison of mode choice (by number of journeys made) by gender

Travel Diary samples are 1,010 (male) and 1,217 (female) for 2009 and between 900 (male) and 906 (female) for 2012. Differences between 2009 and 2012 proportions in SCSP data are significant at p<0.05 for all modes marked with \*.

# Modal split of journeys by age

- 5.14 Table 5.3 compares the mode choice by Larbert/Stenhousemuir residents between 2009 and 2012 based on the share of all journeys made by main mode disaggregated by age.
- 5.15 The changes in modal share for bus travel were quite different for each age group. A significant increase of 5.0 percentage points was found in the modal split for journeys made by bus for respondents aged 55-64 years. In contrast a significant decrease of 6.4 percentage points was identified in respondents aged 18-24 years.
- 5.16 Significant decreases ranging from 13.1 percentage points to 27.3 percentage points occurred in the proportion of respondents making car as driver journeys and in age groups between 25 and 74 years of age. No significant difference was found for the youngest and oldest age groups.
- 5.17 Significant decreases of 5.8 and 7.9 percentage points were found between the proportion of car passenger journeys made by respondents aged 35-44 years and 45-54 years.





Table 5.3: Comparison of mode choice (by number of journeys made) by age

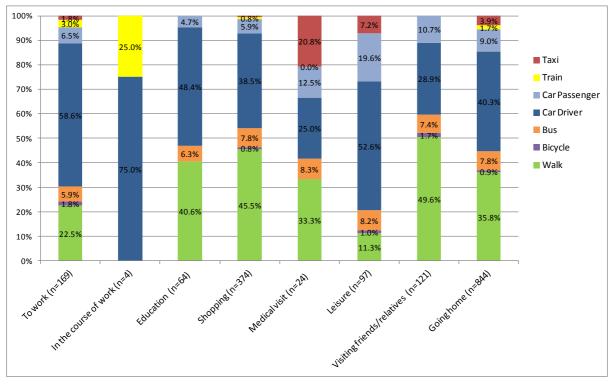
|               |                 | % Point Change |  |        |                 |        |        |  |  |  |  |  |
|---------------|-----------------|----------------|--|--------|-----------------|--------|--------|--|--|--|--|--|
|               | 18 - 24 25 - 34 |                | <b>35 - 44</b>   <b>45 - 54</b>   <b>5</b> |        | 55 - 64 65 - 74 |        | 75 or  |  |  |  |  |  |
|               | years           | years          | years                                      | years  | years           | years  | over   |  |  |  |  |  |
| Walk          | +18.9*          | +19.2*         | +27.4*                                     | +19.7* | +24.0*          | +16.8* | +12.6* |  |  |  |  |  |
| Bicycle       | 0.0             | +0.5           | +2.3                                       | -0.2   | -1.5            | +0.7   | 0.0    |  |  |  |  |  |
| Bus           | -6.4*           | +4.9*          | -1.7                                       | +2.2   | +5.0*           | -0.8   | +10.1  |  |  |  |  |  |
| Car Driver    | -7.9            | -21.3*         | -24.3*                                     | -18.3* | -27.3*          | -13.1* | -25.8  |  |  |  |  |  |
| Car Passenger | -4.1            | -3.3           | -5.8*                                      | -7.9*  | -3.0            | -3.2   | 0.4    |  |  |  |  |  |
| Train         | -1.2            | -5.1*          | +0.6                                       | +1.9   | +1.2            | -0.5   | 0.0    |  |  |  |  |  |
| Taxi          | +0.7            | +3.6           | +3.2*                                      | +3.4   | +1.5            | +0.3   | +5.3   |  |  |  |  |  |

Travel Diary samples range between 111 (75 years or over) and 493 (35-44 years) for 2009 and between 389 (35-44 years) and 50 (75 years or over) for 2012. Differences between 2009 and 2012 proportions in SCSP data are significant at p<0.05 for all modes marked with \*.

#### Modal split of journeys by journey purpose

5.18 Figure 5.3 shows the mode share for each journey purpose in 2012 and Table 5.4 compares the mode choice by Larbert/Stenhousemuir residents between 2009 and 2012 based on the share of all journeys made by main mode disaggregated by journey purpose.

Figure 5.3: Mode share in 2012 (by % of journeys made) by purpose



Travel Diary samples range between 4 (in the course of work) and 844 (going home) for 2012.







Table 5.4 - Change in mode share 2009-2012 (by % of journeys made) by journey purpose

|               | 2009 – 2012 percentage-point change |                       |           |          |                  |         |                             |               |  |  |  |  |
|---------------|-------------------------------------|-----------------------|-----------|----------|------------------|---------|-----------------------------|---------------|--|--|--|--|
|               | To work                             | In the course of work | Education | Shopping | Medical<br>visit | Leisure | Visiting friends/ relatives | Going<br>home |  |  |  |  |
| Walk          | +11.8*                              | -7.6                  | +26.6     | +27.1*   | +8.3             | -3.5    | +35.4*                      | +20.1*        |  |  |  |  |
| Bicycle       | 0.0                                 | -1.3                  | 0.0       | -0.2     | 0.0              | +1.0    | +1.7                        | +0.6          |  |  |  |  |
| Bus           | +3.1                                | -2.5                  | +2.7      | -3.2     | +8.3             | +2.4    | +1.2                        | +0.9          |  |  |  |  |
| Car Driver    | -13.0*                              | +1.6                  | -28.8*    | -14.0*   | -40.6            | -4.2    | -35.7*                      | -19.3*        |  |  |  |  |
| Car Passenger | -2.0                                | -11.4                 | +2.9      | -9.7*    | +6.3             | -0.2    | -3.4                        | -4.5          |  |  |  |  |
| Train         | +0.1                                | +25.0                 | -3.5      | +0.5     | 0.0              | -1.8    | -0.9                        | -0.3          |  |  |  |  |
| Тахі          | +1.8                                | 0.0                   | 0.0       | -0.5     | +20.8            | +6.8    | 0.0                         | +2.7*         |  |  |  |  |

Travel Diary samples range between 32 (medical visit) and 878 (going home) for 2009 and between 4 (in the course of work) and 844 (going home) for 2012. Differences between 2009 and 2012 proportions in SCSP data are significant at p<0.05 for all modes marked with \*.

- 5.19 The proportion of respondents travelling by car as a driver reduced across all journey purposes with the exception of those made in the course of work. The modal split for walking journeys increased for all purposes with the exception of those made for leisure and in the course of work.
- 5.20 Significant increases were identified in the proportion of walking journeys made to work, for shopping, visiting friends/relatives and going home.
- 5.21 Significant decreases were found in the proportion of car driver journeys made for work, education, shopping, visiting friends/relatives and returning home. Significant decreases of 9.7 and 4.5 percentage points were also found in the modal split of car passenger journeys for shopping.

# Modal split of journeys by household car availability

- 5.22 Figure 5.4 illustrates the modal choice of Larbert/Stenhousemuir residents between the 2009 baseline and 2012 post-implementation based on the share of all journeys made by main mode and according to whether or not the respondent lives in a household with a car.
- 5.23 The modal split for walking journeys increased by 13.2 percentage points for respondents in car-owning households and by 14.7 percentage points for in households without a car. These increases were found to be significant at the 95% confidence level.
- 5.24 Significant decreases were identified in the 1.3 percentage point fall in the proportion of respondents in car owning households and 6.0 percentage point decrease in those non car-owning households travelling by bus.







5.25 Significant decreases were also found in the modal splits of car passengers in those living in both types of households and in the proportion of respondents with household car access who made journeys by car as a driver.

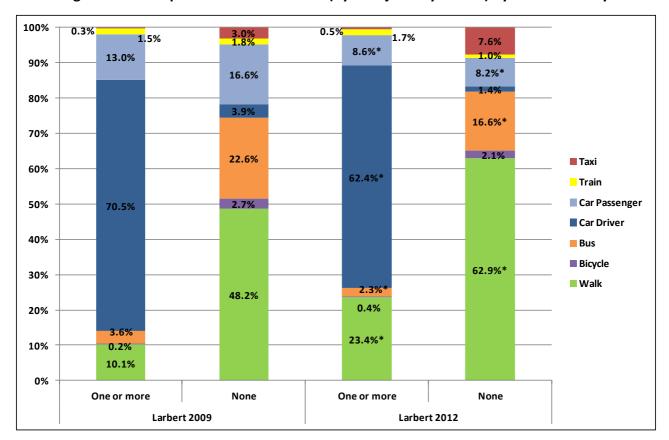


Figure 5.4 - Comparison of mode choice (by % of journeys made) by car availability

Travel Diary samples are 1,897 (one or more cars) and 332 (no car) for 2009 and 1,177 (one or more cars) and 631 (no car) for 2012. Differences between 2009 and 2012 proportions in SCSP data are significant at p<0.05 for all modes marked with \*.

# Modal split of journeys by weekday/weekend

- 5.26 Figure 5.5 compares the modal choice of Larbert/Stenhousemuir residents in 2009 and 2012 based on the share of all journeys made by main mode and disaggregated by weekday/weekend.
- 5.27 The proportion of weekend and weekday car driver journeys fell. In contrast the modal split of walking journeys rose. The proportion of journeys made by public transport (bus and train) fell for weekdays and weekends.
- 5.28 The proportion of weekday and weekend walking trips increased by 22.8 and 19.0 percentage points respectively. These increases were found to be significant at the 95% confidence level.







5.29 Significant decreases were found in the fall in car as driver journeys by 23.6 percentage points on weekdays and 9.9 percentage points at weekends. There were also significant decreases in the modal split of weekday and weekend car passenger journeys.

100% 1.1% 0.6% **2:5%** 3.7% 1.9% 1.4% 1.8% 11.6% 9.2%\* 7.3%\* 90% 18.1% 80% 70% 39.5%\* 44.5%\* Taxi 60% Train 63.1% 54.4% Car Passenger 50% 6.6% Car Driver 40% 1.4% Bus 8.4% Bicycle 30% Walk 20% 39.4%\* 9.1% 33.0%\* 0.4% 0.8% 10% 16.6% 14.0% 0% Weekdays Weekends Weekdays Weekends Larbert 2009 Larbert 2012

Figure 5.5: Comparison of mode choice (by number of journeys made) by weekday/weekend

Travel Diary samples are 1,573 (Weekday) and 651 (Weekend) for 2009 and 1,188 (Weekday) and 616 (Weekend) for 2012. Differences between 2009 and 2012 proportions in SCSP data are significant at p<0.05 for all modes marked with \*.

# Self-reported frequency of use of each mode

- 5.30 The use of different modes of transport can be reported in several ways from this research. In this section we provide data from the section of the household survey which asked people to indicate the frequency with which they used each mode. The data in 2009 and 2012 for car use (as a driver, as a passenger and use of taxis) is shown in Figure 5.6, and for other modes (bus, train, walking and cycling) in Figure 5.7.
- 5.31 Fig 5.6 shows that frequency of use of the car appears to have dropped substantially. The number of people who say they drive on five or more days per week has fallen from 51% to 31% (39% or a 20 percentage-point drop). Use of the car as a passenger has also fallen. Whereas taxi usage, particularly in the once a week category, has increased.







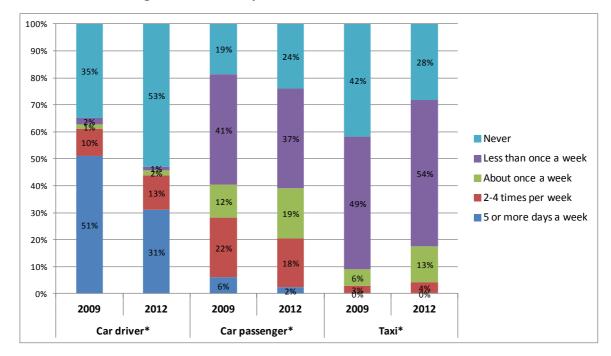


Figure 5.6 - Self reported use of car in 2009 and 2012

Household survey samples of N = 1362, weighted for 2009 and N = 1045 for 2012. Differences between 2009 and 2012 proportions are significant at p<0.05 for all modes marked with \*.

- 5.32 Figure 5.7 shows that there has been some shift in the pattern of bus use so that overall more people are using the bus at least occasionally even if there has been a reduction in the number of people saying they use it five or more days a week. The same pattern is true for train travel.
- 5.33 Overall the changes in self reported cycling frequency are not statistically significant at the 95% confidence level. There is a mixed picture with respect to walking. Overall the data suggests that more people never walk (up from 16% to 20%), but more people say they are walking 2-4 times a week balanced out by a fall in the less frequent categories suggesting that some people are walking a bit more frequently.
- 5.34 The 2012 survey also asked people to register their frequency of use of dial-a-ride services. In Larbert/Stenhousemuir, 96.9% said they never used this service.







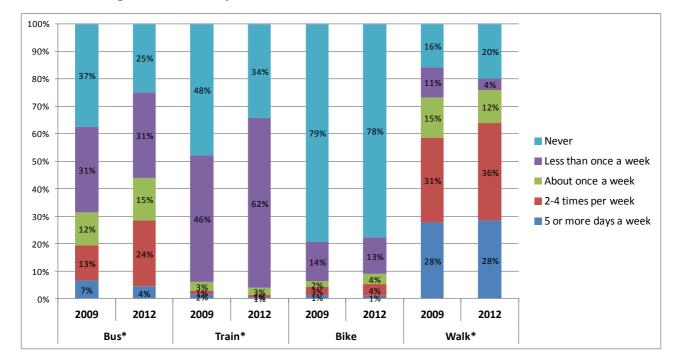


Figure 5.7 - Self reported use of non-car travel modes in 2009 and 2012

Household survey samples of N = 1362, weighted for 2009 and N = 1045 for 2012. Differences between 2009 and 2012 proportions are significant at p<0.05 for all modes marked with \*.

#### Multi-modal travel behaviour

5.35 From the data collected on the frequency of use of each mode, a number of composite indices of travel behaviour were calculated in order to understand the degree to which respondents in each location seem to be more or less dependent on certain modes or, instead, tend to use a mixture of travel options<sup>5</sup>. Figure 5.8 illustrates the degree to which each mode is relied upon in 2009 and 2012. The figures depict the average proportion of trips undertaken by each mode as a fraction of total trips. This is a crude measure, but it has been measured and calculated the same in each survey and so the comparison between years is helpful. The analysis mirrors the analysis above and suggests that car driving has reduced as a proportion of total trips and bus use has increased. Using this measure, the slight increase in cycle use is statistically significant but there has been no increase in use of the car as a passenger.

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<sup>&</sup>lt;sup>5</sup> They were derived by recoding the original travel frequency categories (as outlined above) to reflect the average number of days per year on which a mode was used. This allowed a crude 'total travel frequency score' to be calculated and, from this, the proportional role of each mode in the overall travel portfolio of the respondents. Any mode as a proportion of total travel could range from 0%-100% and could then be classified in to different percentage bands. Note that this relates to frequency of trips and not distance travelled.

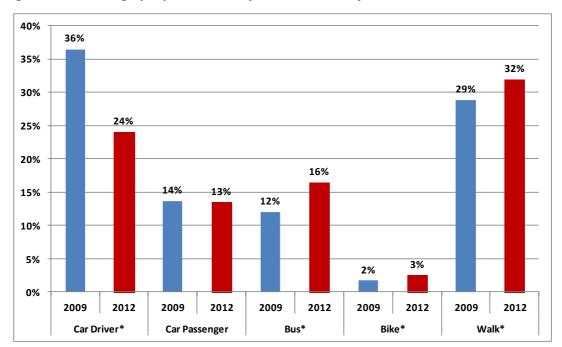


Figure 5.8 - Average proportion of trips undertaken by each mode in 2009 and 2012

Household survey samples of N = 1362, weighted for 2009 and N = 1045 for 2012. Differences between 2009 and 2012 proportions are significant at p<0.05 for all modes marked with \*.

# Demographic differences in behaviour

5.36 Figure 5.9 contrasts the average number of days travelled by each mode in households with or without cars. It shows the contrast in the use of car travel, bus travel and walking between car and non car owning households and the equal amount of bicycle use between them. When comparing across years, car passenger use has fallen and taxi use risen most in non car households. Other changes (eg in bus use and walking) are not statistically significant.







Car driver Car passenger Bus Bike Walk Taxi 195 200 182\* 180 160 150 145 Average no. Days p.a. 140
100
80
6 125 125 101 70 68 36 36 40 30 30\* 26\* 21 15\* 20 13 11 13 10 9 4 2 0 With access to a car Without access to a car With access to a car Without access to a car 2009 2012

Figure 5.9: Frequency of use of each mode in households with or without a car in 2009 and 2012 (ave. no. days. per annum)

Household survey samples of N = 1362, weighted for 2009 and N = 1045 for 2012. Differences between 2009 and 2012 for each type of household are significant at p<0.05 for all modes marked with \*.

5.37 There are many other relationships between demographic characteristics and travel patterns that could potentially be examined. Table 5.5 gives a sense of the magnitude and direction of the differences between various sub-groups and examines changes in their travel behaviour in the two survey periods. It uses the 'average number of days per annum' indicator as a way of capturing self-reported frequency of use of each mode.





Table 5.5 - Average no. of days per annum indicator for key socio-demographic factors in 2009 and 2012

|                 | 2009<br>Ave. no. days p.a. |     |      |      |      | 2012<br>Ave. no. days p.a. |     |      |      | Percentage Difference between 2009 & 2012 |            |     |      |      |      |
|-----------------|----------------------------|-----|------|------|------|----------------------------|-----|------|------|---|------------|-----|------|------|------|
|                 | Car driver                 | Bus | Cyde | Walk | Тахі | Car driver                 | Bus | Cyde | Walk | Тахі                                      | Car driver | Bus | Cyde | Walk | Тахі |
| Male            | 162                        | 46  | 14   | 133  | 12   | 117                        | 54  | 21   | 138  | 20  | -28%       | 17% | 46%  | 4%   | 67%  |
| Female          | 138                        | 48  | 7    | 127  | 13   | 88                         | 68  | 6    | 134  | 24  | -36%       | 41% | -20% | 6%   | 77%  |
|                 |                            |     |      |      |      |                            |     |      |      |   |            |     |      |      |      |
| With children   | 188                        | 38  | 13   | 135  | 11   | 135                        | 60  | 14   | 161  | 22  | -28%       | 58% | 8%   | 19%  | 90%  |
| Without         | 135                        | 51  | 10   | 127  | 13   | 90                         | 62  | 12   | 127  | 22  | -33%       | 23% | 27%  | 0%   | 67%  |
|                 |                            |     |      |      |      |                            |     |      |      |   |            |     |      |      |      |
| In work         | 191                        | 37  | 14   | 129  | 12   | 170                        | 49  | 19   | 138  | 20  | -11%       | 30% | 33%  | 7%   | 63%  |
| Not working     | 103                        | 58  | 7    | 129  | 13   | 50                         | 71  | 8    | 136  | 24  | -52%       | 23% | 20%  | 5%   | 80%  |
|                 |                            |     |      |      |      |                            |     |      |      |   |            |     |      |      |      |
| With disability | 95                         | 47  | 7    | 110  | 18   | 44                         | 46  | 6    | 94   | 27  | -54%       | 0%  | -6%  | -14% | 56%  |
| Without         | 162                        | 47  | 12   | 134  | 12   | 114                        | 64  | 14   | 145  | 21  | -30%       | 36% | 24%  | 8%   | 81%  |
|                 |                            |     |      |      |      |                            |     |      |      |   |            |     |      |      |      |
| 16-34 years     | 152                        | 52  | 17   | 143  | 13   | 116                        | 74  | 21   | 156  | 24  | -24%       | 41% | 22%  | 9%   | 89%  |
| 35-64 years     | 165                        | 42  | 11   | 132  | 12   | 113                        | 56  | 13   | 140  | 20  | -32%       | 33% | 22%  | 6%   | 73%  |
| 65+ years       | 93                         | 56  | 2    | 101  | 16   | 46                         | 62  | 2    | 95   | 25  | -51%       | 11% | -2%  | -7%  | 55%  |

Differences are significant at p<0.05 between demographic categories unless the box is shaded grey.

- 5.38 Men report higher car and cycle use in both survey years. Walking and taxi rates are the same. Over the study period, women reduced their use of the car and cycling more than men, despite using these modes less to start with. Women also increased their use of the bus. Men increased cycling.
- 5.39 Respondents with children drive more than those without. In the post intervention survey, those with children increased their level of bus use, walking and taxi use much more than those without. Those without children increased their rates of cycling much more.
- 5.40 Those in employment are much more likely to use the car and they demonstrated a less pronounced reduction in car use over the period than those out of work. Employed people are also much more likely to cycle and they increased this and bus use more than those out of work. Taxi use was increased by both groups, but more so in those out of work.
- 5.41 Those with a long standing illness or disability (16% in 2009, 13% in 2012) are less reliant on the car in both periods and reduced their car use more than those without a disability. In 2009, there was no difference in bus use between the two groups, but it was only those without a disability that increased their bus use. People with an illness or disability reduced the amount of walking activity whereas those without increased theirs a little.







5.42 Younger age groups are more likely to walk and cycle in both years and increased their use of the bus most over the period. The youngest age group also show the smallest reduction in car use. Older age groups report the largest reductions in car use and reductions in walking and cycling.

#### Self reported change in mode use

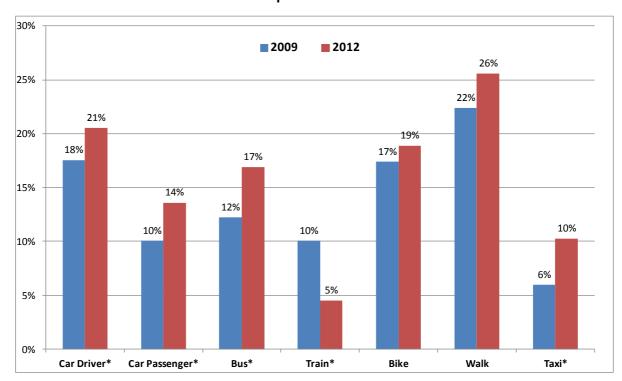
- 5.43 The household survey asked respondents to indicate whether their use of each mode had increased, reduced or stayed the same in the past 12 months. In 2012 (the after survey), it also asked respondents to indicate whether they had experienced one or more 'life events' such as changing job, moving home, having a child etc. By looking at these indicators, it is possible to assess the extent to which they may be related to other changes in peoples' lives, and the degree to which different modes are subject to the greatest amount of change.
- Figure 5.10 shows the degree to which respondents reported that they had changed each 5.44 mode of transport in the past 12 months<sup>6</sup>. Overall walking underwent the greatest change in 2012 and a greater level of change than had been reported in the previous 12 months prior to the 2009 survey (although the difference was not statistically significant). When looked at in conjunction with Figure 5.11, we can see that this change was made up predominantly of people increasing their walking with over twice as many people saying they had increased walking than said they had reduced it.
- 5.45 Overall, car driving, car passenger use, bus use and taxi use underwent more change in the previous twelve months to 2012 than in 2009. When looked at in conjunction with Figure 5.11, we can see that this change was made up predominantly of people reducing each of these modes of transport. For example, more people reported a change in bus travel in 2012 and this was made up of more people saying they had reduced their bus use (9.7%) than increased it (7.3%). With car use, for example, more than twice as many people said they had reduced car driving as said they had increased it.

<sup>&</sup>lt;sup>6</sup> Only those who had reported that they had used each mode at least once in the last 12 months.



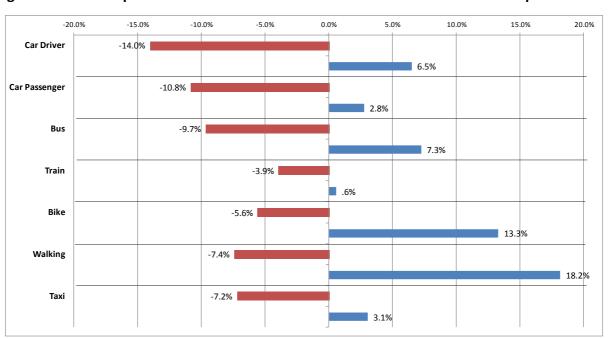


Figure 5.10 – Percentage of respondents who reported some change (up or down) in their use of each mode in the previous 12 months



Household survey samples of N = between 275 &1126- respondents for 2009 and 223 & 837 for 2012. Differences between 2009 and 2012 are significant at p<0.05 for all modes marked with \*.

Figure 5.11– Self reported reduction or increase in each mode in the 12 months prior to 2012



Household survey samples of N = between 223 & 837 (2012).







- 5.46 The survey allows us to cross tabulate responses to examine the combined changes in behaviour that individuals undertake. In this case we wanted to understand whether a self-reported increase or decrease in car use tends to correspond with changes in other modes<sup>7</sup>.
- 5.47 Figures 5.12 and 5.13 report the results and show that when car travel is reported to increase (6.5% of the respondents), people tend to report a corresponding reduction in all other modes, particularly car passenger use, bus use and walking. When car travel is reported to reduce (14% of the respondents), there was a notable increase in walking, cycling and bus use in Larbert/Stenhousemuir.

When car driving increased ... 20.0% 15.4% 10.0% 4 2% 3.7% 0.0% -10.0% -11.1% -20.0% -22.2% -24.0% -30.0% -40.0% -50.0% -53.8% -54.2% -60.0% -58.3% -70.0% Car Passenger Bus Train Bike Walking Taxi

Figure 5.12 – Self-reported changes in other modes when car travel was reported to increase

Household survey samples of N = between 223 & 837 (2012).

<sup>&</sup>lt;sup>7</sup> Bearing in mind It is not possible from this repeated cross-section survey approach to determine whether these changes are direct trip substitutions, only average behaviour across individuals in the sample.



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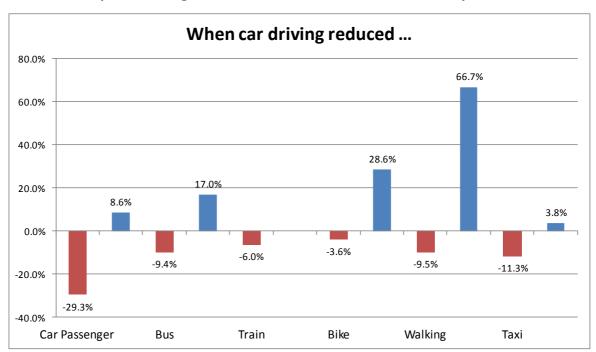


Figure 5.13 – Self-reported changes in other modes when car travel was reported to reduce

Household survey samples of N = between 223 & 837 (2012).

### Self reported change in mode use related to 'life events'

5.48 Change in travel behaviour may occur when people undergo an event in their life such as changing job or moving house<sup>8</sup>. Experience in the previous 12 months of these life events, or 'moments of change' were recorded in 2012 (though not in 2009). Figure 5.14 shows that the experience of at least one life event leads to statistically significant greater change in train use. On the other hand, taxi use seems to have the greatest change where people experience stability in their lives (i.e. they have not undergone any life events as listed on the survey)<sup>9</sup>. This a surprising effect as taxi is often a mode which can help people cope with uncertainty and change, but the population of the area has been changing with people moving in to the new housing areas. It may be that the house movers are less dependent on taxis than those who have not experienced a recent life change.

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<sup>&</sup>lt;sup>8</sup> These included: stating work/ changing place of employment; stopped working/ retired; started/ finished college or university; moved house; birth/ adoption of a child; child started school; child left home/ gone to college or university; bought a car; got rid of a car; obtained a driving licence; new health problem.

<sup>&</sup>lt;sup>9</sup> Note these data do not include people who indicated that they 'never' used the mode in the past twelve months. However, this is expected to have little impact on this analysis as this would mean they stopped using the mode before the life event given that we also asked about life events in the past 12 months.

30.0% ■ At least one life Event ■ No Life Event Proportion claiming to have changed their use of each 25.0% 20.0% **9**5.0% 10.0% 5.0% 0.0% Car driver Car Bus Train\* Cycle Walk Taxi\* Passenger

Figure 5.14– The proportion of people claiming to change use of each mode according to the experience of life events in the previous 12 months (2012)

Household survey samples of N = between 203 &1038-(for 2012). Differences between life event/ no life event significant at p<0.05 for all modes marked with \*.

## Pedestrian and cycle count data

5.49 Figure 5.15 shows the location of cycle counters, pedestrian cameras and traffic counters in the Larbert and Stenhousemuir area.







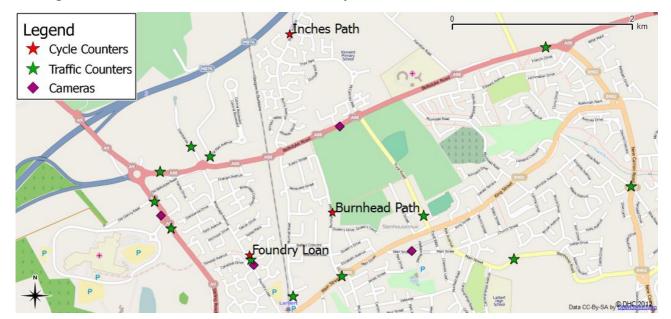


Figure 5.15 – Initial locations of Pedestrian/Cycle Counters, traffic counters and cameras

- 5.50 Pedestrian monitoring has been hampered by problems with the cameras and software issues. This has meant that data have been unavailable from the pedestrian cameras, which in turn means that the ability to monitor actual walking levels had been limited. In September 2012 data were still unavailable, with ongoing problems with software compatibility. The initial cameras were not fit for purpose and more suited for traffic offenses surveillance. Additional software has been bought in order to make the cameras able to count pedestrians.
- 5.51 Cycle count data has been recorded at the three sites shown in Figs. 5.16-5.18. Daily average cycle numbers are available between March 2009 and December 2011 and are shown in Table 5.6 below. The number of cyclists is generally low, with daily averages not exceeding 20-25 for summer months.





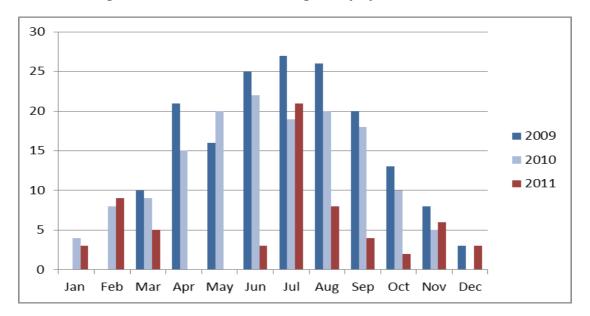


Figure 5.16 - Inches Path Average Daily Cycle Flows 2009 -2011

5.52 The highest numbers of cyclists were observed on Inches Path. For summer months of 2009 there were 25-27 cyclists a day on average. The fall in the number of cyclists on the Inches path in 2011 could have been affected by construction work. In April and May 2011 no cyclists were recorded on the path, and their numbers were noticeably reduced during the following months, when compared to the levels from 2010.

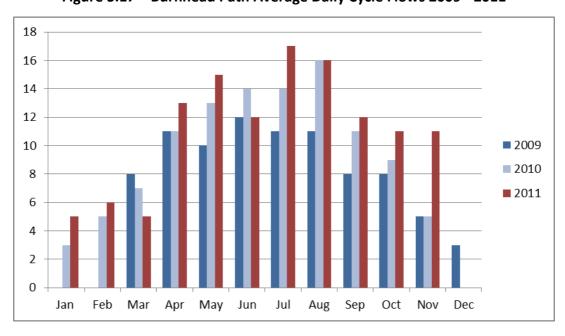


Figure 5.17 - Burnhead Path Average Daily Cycle Flows 2009 - 2011

5.53 Burnhead Avenue recorded notable increases in cycle numbers for most months between 2009 and 2010. The trend of growth continued in 2011, with increases compared to the previous year for most months apart from March and June. In total, between 2009 and





2011 there was a 45-55% increase in cyclist numbers for summer months (July – September), with increases for most months apart from March.

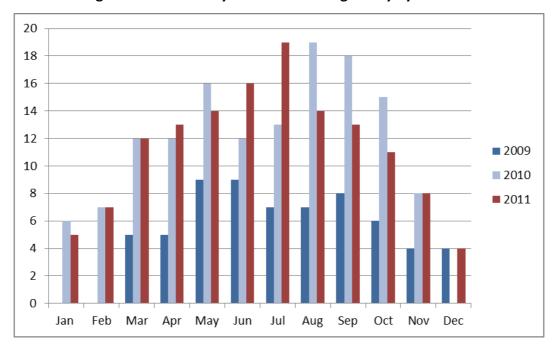


Figure 5.18 - Foundry Loan Path Average Daily Cycle Flows

- 5.54 Despite some increases of cycling levels in 2010 when compared with 2009 (33% increase in June-June and 170% in August-August), Foundry Loan recorded decreases from August 2011 onwards, when compared to the levels from previous year.
- 5.55 When daily cycle flows for counters located within the area in scope are compared to the locations outside the targeted area (Table 5.6), the growth in average daily cycle flows in the Larbert/Stenhousemuir area, if any, seems of less consequence. Total numbers of cyclist measured by counters located in Falkirk and Grangemouth have increased much more significantly than those seen in Larbert.





Table 5.6 -Average Daily Cycle Flows (Monday – Friday) in the Falkirk area in 2010-2011

|                             | Мо   | nday - Frid | day         | Monday - Sunday |                 |             |
|-----------------------------|------|-------------|-------------|-----------------|-----------------|-------------|
| Counter Location            | 2010 | 2011        | Growth<br>% | 2010            | 2011            | Growth<br>% |
| Denny (behind Denny High    |      |             |             |                 |                 |             |
| School)                     | 10   | 14          | 40.0        | 10              | 14              | 40.0        |
| Lionthorne Road, Falkirk    | 3    | 4           | 33.3        | 3               | 4               | 33.3        |
| Tinto Drive, Grangemouth    | 16   | 20          | 25.0        | 16              | 20              | 25.0        |
| Torwood Avenue, Grangemouth | 28   | 34          | 21.4        | 26              | 32              | 23.1        |
| Inchyra Road, Grangemouth   | 40   | 44          | 10.0        | 36              | 41              | 13.9        |
| Etna Road, Falkirk          | 30   | 34          | 13.3        | 27              | 30              | 11.1        |
| Beancross Road, Grangemouth | 45   | 50          | 11.1        | 40              | 44              | 10.0        |
| Falkirk Stadium             | 141  | 172         | 22.0        | 145             | 157             | 8.3         |
| Cauldhame Farm, New Carron  | 22   | 20          | -9.1        | 21              | 20              | -4.8        |
| Burnhead Path, Larbert      | 9    | 10          | 11.1        | 9               | 10              | 11.1        |
| Foundry Loan, Larbert       | 12   | 12          | 0.0         | 12              | 11              | -8.3        |
| The Inches, Larbert         | 11   | 5           | -54.5       | 12              | 5 <sup>10</sup> | -58.3       |

### School travel

- 5.56 A growth in cycling is evident from 2009 to 2011 based on hands up surveys of travel to primary and secondary schools published by Sustrans (Fig. 5.19). There are fluctuations in the percentage of pupils cycling over the years, with an overall decrease between 2008 and 2011, although it remains much higher than figures recorded at the national level (4.2% compared to national 3.0% in 2012).
- 5.57 In the area, there are examples of schools being very successful in promoting sustainable travel. Larbert High School has been awarded Cycling Scotland's 'Cycle Friendly School Award' in 2012. For this school, data from the Hands Up Survey are only available for 2011 (Fig. 5.20 below). When compared with local and national level, the high percentage of walking for that school in 2011 is apparent, although the cycling levels as declared by pupils remained low for that year. Particularly notable is the fact that an additional 15.0% of pupils in 2011 used Park & Stride (which is understood to be included below in 'Car/Driven' category), which gives an impressive total of 85.7% of students walking, cycling or using park & stride.

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<sup>&</sup>lt;sup>10</sup> Reduced due to construction works.

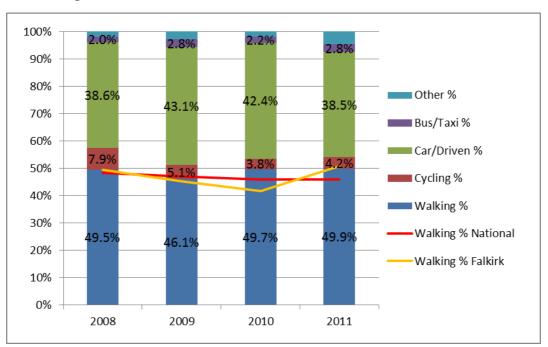
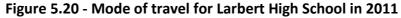
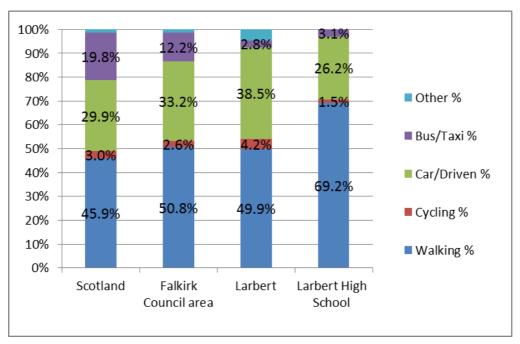


Figure 5.19 - Travel modes to School in Larbert/Stenhousemuir





5.58 The Council also reports its own hands up surveys in addition to the national data collated by Sustrans. Not all primary and secondary schools are included in the national data in all years. Although the Council data shows a similar direction in the trends for each mode, the Council data shows differences in the rate and level of change. This may be due to the time of year when the surveys are undertaken. Falkirk Council undertake their surveys in May and Sustrans conduct surveys in September. This emphasises that care is needed





when interpreting the hands up data. Many more people travel to secondary schools by bus than to primary school so it is assumed that the addition of an extra secondary school in 2011 has affected the Council data.

Table 5.7 - Larbert/Stenhousemuir Hands Up Survey Data (%)

| Year | Walk | Cycle | Skate/  | Bus | Car | Park & | Taxi |
|------|------|-------|---------|-----|-----|--------|------|
|      |      |       | Scooter |     |     | Stride |      |
| 2005 | 40   | 3     | N/A     | 6   | 50  | N/A    | 1    |
| 2006 | 48   | 1     | N/A     | 9   | 40  | N/A    | 2    |
| 2007 | 45   | 5     | N/A     | 9   | 40  | N/A    | 1    |
| 2008 | 49   | 8     | 2       | 2   | 30  | 7      | 2    |
| 2009 | 39   | 10    | 6       | 1   | 28  | 15     | 1    |
| 2010 | 45   | 8     | N/A     | 1   | 44  | N/A    | 2    |
| 2011 | 57   | 4     | 3       | 14  | 18  | 3      | 1    |

### Summary of travel behaviour outcomes

- 5.59 Table 5.9 summarises the changes in travel behaviour observed through the different data sets and analysis comparing the changes in mode share from the travel diary with the equivalent figures from the SHS survey and any corroborating evidence. Where figures shown are percentage point changes this means, for example, that a change from 15.8% of trips being made on foot to 37.2% is a 21.4 percentage point change.
- 5.60 The main conclusions and observations on travel behaviour that can be drawn are:
  - The proportion of all trips made by car as a driver and as a passenger has dropped. This is particularly notable when contrasted with the background trend as represented by data from the SHS for equivalent sized towns over a broadly similar timescale where car driving and passenger use fell by a much smaller amount.
  - There has been a sharp rise in the proportion of trips made by walking and this has increased over 10 times more than in the comparable SHS locations. This is backed up by an increase reported in self-reported frequency of walking.
  - None of the indicators in the travel survey recorded a statistically significant change
    in cycling trips and the cycle counters corroborate this lack of increase.
    Nevertheless, the increase in cycling is approximately in line with the national
    trend.
  - Evidence on bus use is mixed. While survey respondents said that in general they
    were making greater use of buses, this was not borne out when questioned in the
    travel diary about specific trip-making behaviour. Unfortunately, bus patronage
    data which could have provided additional evidence was not made available to the
    evaluation team.
  - Taxi use has risen slightly overall.







Table 5.8 – Summary of evidence on overall travel behaviour change

|                  | Change in trip mode share (main mode) across SCSP target areas   |        |  | Change in trip<br>mode share in<br>comparable<br>areas | Corroborative support for change |  |  |  |
|------------------|--|--------|--|--|----------------------------------|--|--|--|
|                  | From SCSP evaluation travel diaries 2009 - 2012  |        | From analysis of<br>national SHS<br>data 2008-11 | frequency from   |                                  | Local user surveys                             |  |  |
|                  | 2009   | 2012   | %-point change                                   | %-point change   | %-point change                   |  |  |  |
| Walking          | 15.8%  | 37.2%  | +21.4  | +1.6   | +5.5                             | Council data shows increased walking to school |  |  |
| Cycling          | 13.070   | 37.270 | 121.7  | 11.0   | 13.3                             | Average daily cycle flows no greater than      |  |  |
|                  | 0.6%   | 0.9%   | +0.4   | +0.5   | +1.2                             | surrounding area.                              |  |  |
| Bus              | 6.4%   | 7.3%   | +0.8   | +0.1   | +8.9                             |  |  |  |
| Car as driver    | 60.5%  | 41.1%  | -19.4  | -1.5   | -14.4                            |  |  |  |
| Car as passenger | 13.5%  | 8.5%   | -5.0   | -1.5   | -7.6                             |  |  |  |
| Train            | 1.6%   | 1.5%   | -0.1   | +0.9   | -1.5                             |  |  |  |
| Motorbike        | 0.1%   | 0.3%   | +0.2   | +0.2   | +0.4                             |  |  |  |
| Тахі             | 0.7%   | 3.0%   | +2.3   | -0.3   | +1.3                             |  |  |  |
| Notes  ✓         | Blue shading shows observed change is statistically significant at p<0.05  means data shows trend in same direction as observed change; X means data shows opposing trend  means corroborative data is inconclusive; n/a means data not available or not collected |        |  |  |                                  |  |  |  |







### 6.0 Attitudinal Outcomes

#### Attitudes to the car

- 6.1 Figure 6.1 shows the changes between 2009 and 2012 for all the attitudinal measures related to the car. Although all changes (except (h)) are statistically significant, the overall pattern is one of relatively stable attitudes (although it should be noted that Figure 6.1 disguises some shifts between strongly (dis)agree & (dis)agree). Note that question a e were asked of the whole sample but questions f I were asked of car users only.
- Overall, there are still more people saying they would like to increase their car travel than reduce it and this number has increased slightly over the period. Given that there has been a large reduction in car trip mode share in Larbert/Stenhousemuir over the period, it is possible that, for some people, this is not regarded as a positive thing. It appears from these results that the environmental impacts of car use are less of a concern in 2012 as there is a greater belief that people should be able to use their cars as much as they like and car users also say they are less willing to pay higher taxes on car use, even if they know the revenue would be used to support public transport.
- 6.3 For car users, there are more people saying that reducing their car use would make them feel good, that they are actively trying to use their car less, that it would be easy for them to reduce their car use and are interested in reducing it in the future. There are also more people believing there are practical alternatives to most of the car trips they make. These results suggest that car driving behaviour could reduce even more than it has done already.







Figure 6.1 - Attitudes to car use in 2009 and 2012

Household survey samples of N = 1362, weighted for 2009 and N = 1045 for 2012. Samples for individual questions vary. Differences between 2009 and 2012 proportions are significant at p<0.05 for all questions marked with \*.

Using scores on '(g) I am not interested in reducing my car use' and '(k) it would be easy to reduce some of my car use', the sample can be segmented into four groups depending on their combination of scores on these two items. Figure 6.2 compares the sample proportions which fell into these four groups in 2009 and 2012. The change in the proportion of respondents in each segment was statistically significant between the two years. When looked at in combination like this, we see that the willing and able segment has indeed increased as the results of the single attitude statements above would suggest, but there has also been an increase in the proportion of people who say they are willing but not able. Indeed, there has also been an increase in the size of the 'not willing' groups.





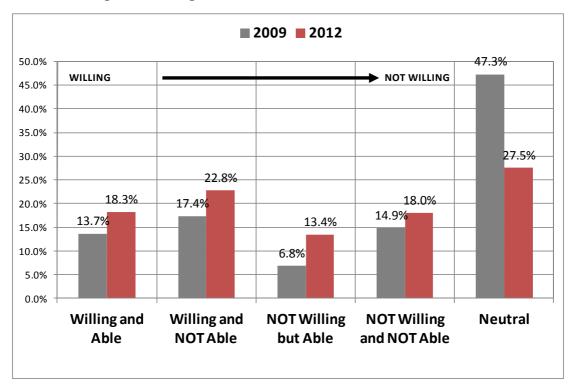


Figure 6.2 – Segmentation of attitudes to car use reduction

Household survey samples of N = 1362, weighted for 2009 and N = 1045 for 2012. Samples for individual questions vary. Differences between 2009 and 2012 are statistically significant at p<0.05.

### Attitudes to the bus

6.5 Changes in attitudes towards bus travel have been mixed since 2009. Figure 6.3 displays the agree/disagree scores for all the attitude questions in 2009 and 2012. More people say they like travelling by bus in 2012 and there has been an improvement in perceptions of accessibility by bus, daytime frequency, feelings of personal security in the evening and the availability of information about bus services. Attitudes to bus fares have deteriorated and for other attitudes there has been an increase in both the agreement and disagreement with the statement giving an overall neutral result.





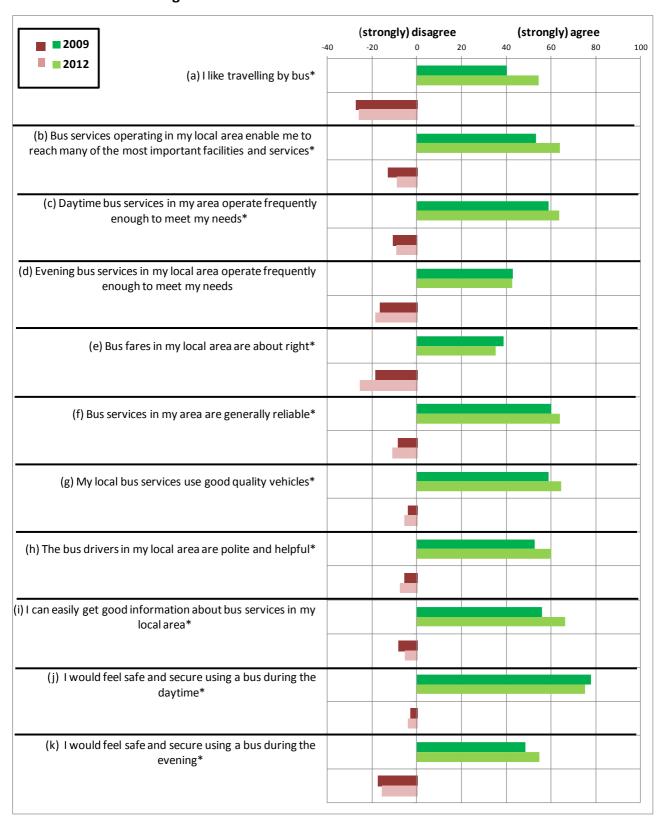


Figure 6.3 - Attitudes to bus travel in 2009 and 2012

Household survey samples of N = 1362, weighted for 2009 and N = 1045 for 2012. Samples for individual questions vary. Differences between 2009 and 2012 proportions are significant at p<0.05 for all questions marked with \*.







### Attitudes to walking

As shown in Figure 6.4, attitudes to walking have either not changed very much or have improved slightly. Larbert/Stenhousemuir residents have improved their perceptions of the walking environment or personal security. However, Fewer people in 2012 agree with the statement that they should walk more to keep fit (and more people disagree) and slightly more people in 2012 agree (although less disagree) with the idea that they do not walk because it takes too long.

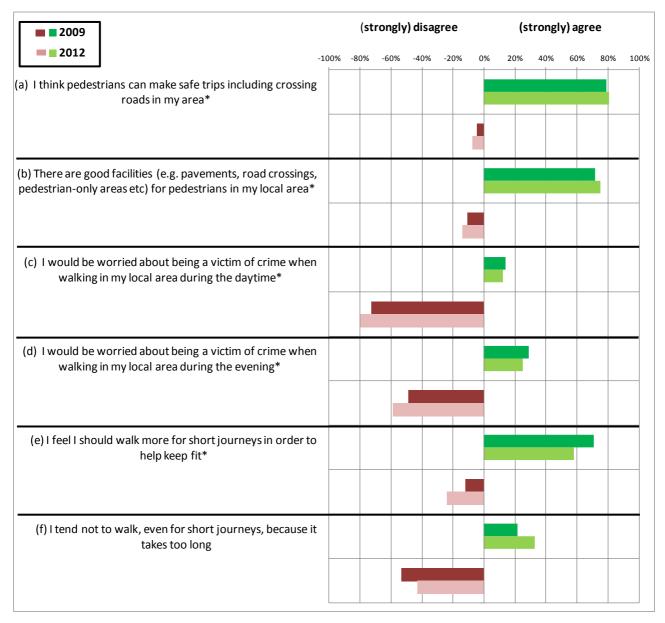


Figure 6.4 - Attitudes to walking in 2009 and 2012

Household survey samples of N = 1362, weighted for 2009 and N = 1045 for 2012. Samples for individual questions vary. Differences between 2009 and 2012 proportions are significant at p<0.05 for all questions marked with \*.





### Attitudes to cycling

6.7 Attitudes to cycling have improved. More people agree that cyclists can make safer trips and the same is true for perceptions about facilities for cycling such as cycle lanes and cycle parking. There has been no statistically significant change in the number of people agreeing that cycling is a healthy way to travel around.



Figure 6.5 Attitudes to cycling in 2009 and 2012

Household survey samples of N = 1362, weighted for 2009 and N = 1045 for 2012. Samples for individual questions vary. Differences between 2009 and 2012 proportions are significant at p<0.05 for all questions marked with \*.

### Attitudes to the environment

6.8 Larbert/Stenhousemuir residents appear as though they might have become slightly more sceptical about environmental issues. Since 2009, more people agree (and fewer disagree) that environmental problems have been exaggerated and environmental identity has not got stronger.





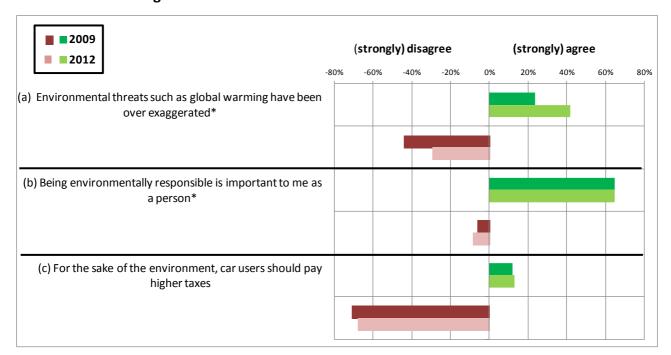


Figure 6.6 - Attitudes to the environment in 2009 and 2012

Household survey samples of N = 1362, weighted for 2009 and N = 1045 for 2012. Samples for individual questions vary. Differences between 2009 and 2012 proportions are significant at p<0.05 for all questions marked with \*.

### Attitudes to the local neighbourhood

### **Observed changes**

6.9 Figure 6.7 shows an increase in the degree to which congestion is seen as a problem in Larbert/Stenhousemuir and a few more people believe that more roads are required. On other neighbourhood indicators, there has been less of a change, but in each case there has been some improvement in perceptions. Overall rating of the neighbourhood has improved marginally, and there is more agreement that the built environment makes for a pleasant place to live, that there is good access to local shops and services and there are friendly people and a good sense of community.





(strongly) disagree (strongly) agree **2009 2012** 120% -60% -20% 40% 80% 100% (a) Traffic congestion is a problem in my local area\* (b) More roads are needed in my local area\* (c) How would you rate your neighbourhood as a place to (d) There are friendly people and a good sense of community in my neighbourhood (e) There is good access to local shops and services in my (f) The buildings, streets and public spaces (e.g. squares, parks etc) in my neighbourhood help make it a pleasant place to live\*

Figure 6.7 Attitudes to the local neighbourhood in 2009 and 2012

Household survey samples of N = 1362, weighted for 2009 and N = 1045 for 2012. Samples for individual questions vary. Differences between 2009 and 2012 proportions are significant at p<0.05 for all questions marked with \*.

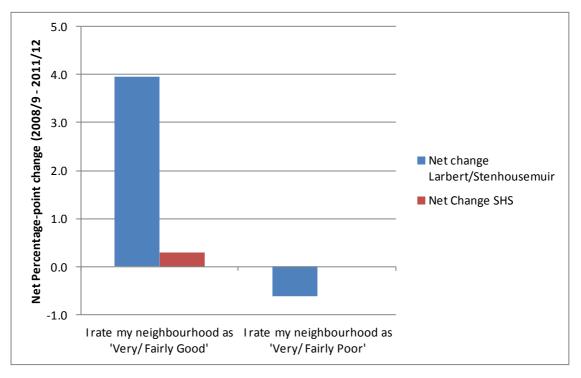




#### **Comparison with SHS statistics**

6.10 The SCSP survey asked an identical question to the SHS survey 'How would you rate your neighbourhood as a place to live'. In Figure 6.8 we see that the increase in the number of people rating their neighbourhood as 'very' or 'fairly' good has increased much more than the SHS data for equivalent sized downs. There has also been a greater reduction in the number rating it as poor.

Figure 6.8 Comparison of SCSP and SHS trends in neighbourhood rating (net percentage-point changes 2008/9 – 2011/12)



Household survey samples of N = 1362, weighted for 2009 and N = 1045 for 2012. Differences between 2009 and 2012 proportions in SCSP sample on the neighbourhood rating question are significant at p<0.05\*.

### Self-reported health and physical activity

- 6.11 Both self-reported levels of physical activity and self-reported health were surveyed to establish the degree to which active travel may be contributing to physical activity levels and to monitor any changes over the intervention period.
- 6.12 Figure 6.9 summarises the responses to self-rating of general health in 2009 and 2012 and breaks these down by gender in Figure 6.10. However, the small changes seen in both of the analyses in these graphs are not statistically significant.





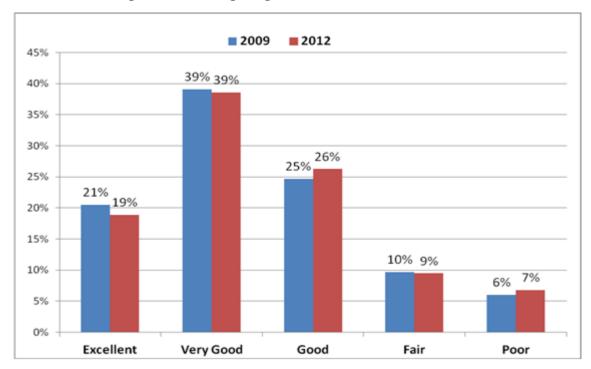


Figure 6.9 - Ratings of general health in 2009 and 2012

Household survey samples of N = 1362, weighted for 2009 and N = 1045 for 2012. Differences between 2009 and 2012 proportions are not significant at p<0.05.

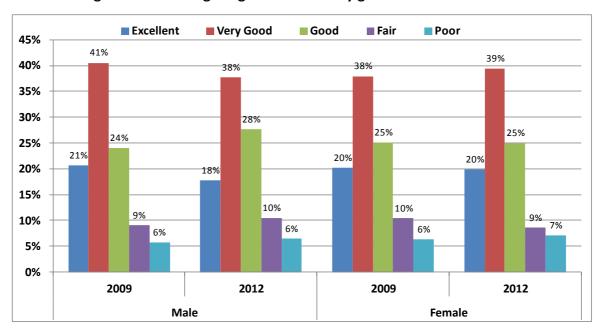


Figure 6.10 - Ratings of general health by gender in 2009 and 2012

Household survey samples of N = 1362 (Male N=647, Female = 710), weighted for 2009 and N = 1045 for 2012 (Male N=497, Female = 548). Differences between 2009 and 2012 proportions are not significant at p<0.05.





- 6.13 Respondents were asked to record how many days per week (outside of work) they typically undertake at least 30 minutes of moderate exercise. The wording from the Scottish Household Survey was used to explain that this activity did not need to be undertaken all in one go, but could be across more than one session in a day. The Scottish Physical Activity Strategy recommends that adults should be accumulating 30 minutes or more of moderate activity on most days of the week<sup>11</sup>. There is a long term target in Scotland for 50% of all adults over 16 to meet this level by 2022.
- Overall, in 2009 36.2% of the sample undertook this level of exercise and this had reduced to 24.0% in 2012. Also important is the change in the number of people who say they exercise on 'no days' which increased from 23.9% to 26.3%.
- 6.15 Figure 6.11 looks at physical activity levels by gender. Here we see that in 2009 around 36% of both males and females were meeting the target (every day + 5-6 days per week), but in 2012 there had been a disproportionately larger drop in female activity levels. In 2012 29% of males were meeting the target compared to only 19% of females. The number of women saying they exercised on 'no days' had also increased whereas they had reduced slightly for men. Just under a quarter of men and 29% of women in Larbert/Stenhousemuir still undertake no physical exercise at all.

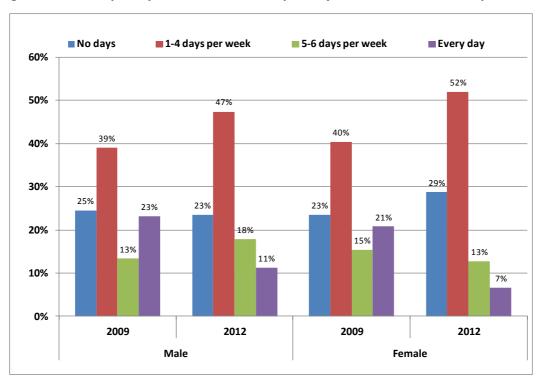


Figure 6.11 - Frequency of at least 30 mins per day of moderate exercise per week

Household survey samples of N = 1362 (Male N=647, Female = 710), weighted for 2009 and N = 1045 for 2012 (Male N=497, Female = 548). Differences between 2009 and 2012 proportions are significant at p<0.05.

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<sup>11</sup> http://www.scotland.gov.uk/Topics/Health/health/Introduction

6.16 Respondents were also asked to record how physically active they are at work or college. When males and females are analysed separately, men are seen to have increased their level of activity from 67% to 79% saying they are fairly or very physically active at work or college and women have also increased this slightly from 65% to 67%.

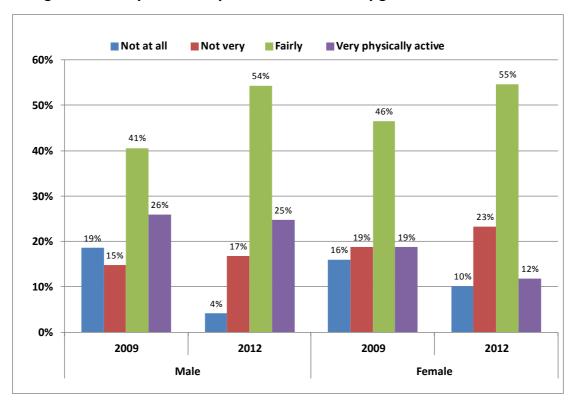


Figure 6.12 - Physical activity carried out at work by gender in 2009 and 2012

Household survey samples of N = 1362 (Male N=647, Female = 710), weighted for 2009 and N = 1045 for 2012 (Male N=497, Female = 548). Differences between 2009 and 2012 proportions are significant at p<0.05.

#### Comparison with the Scottish Health Survey

- 6.17 The SCSP asked identical or similar questions on health and physical activity to the Scottish Health Survey (SHeS). When comparing the change in these indicators between 2009 and 2012 to the changes reported in this comparison data (Table 6.1) (although note the period covered in the SHeS is only 2008 2010), it suggests that the SCSP sample residents of Larbert/Stenhousemuir have shown a smaller deterioration in self reported general health compared to the wider region covered by the Health Board for the area. The number of people who say their health is good has reduced less compared to a slight the Health Board Region, and the number of people reporting poor health has also increased less.
- 6.18 With respect to the physical activity target, the picture is not as good, with a much greater reduction in the number of people reaching the target in the SCSP sample than the Health Board statistics indicate.







Table 6.1 - Difference in self-reported health indicators in Larbert/Stenhousemuir and Scottish Health Survey between 2009-12 or 2008-10

|                                | %-point Change                              |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|
|                                | Larbert/Stenhousemuir SCSP<br>(2009 – 2012) | Scottish Health Survey^<br>(2008 – 2010) |  |  |  |  |
| How is your health in general? |   |  |  |  |  |  |
| Excellent~/ Good/ Very         | -0.5  | -8                                       |  |  |  |  |
| Fair                           | -0.2  | +5                                       |  |  |  |  |
| Poor                           | +0.7  | +2                                       |  |  |  |  |
| Physical Activity Target       |   |  |  |  |  |  |
| % reaching the target          | -12.3                                       | -1.0                                     |  |  |  |  |

<sup>^</sup> Forth Valley Health Board. ~Note that the category 'excellent' is additional in the SCSP data.





### 7.0 Awareness Outcomes

7.1 The 2012 post-intervention survey asked a variety of questions about people's awareness of changes to various transport infrastructures and services in their town. It also attempted to gauge recognition and interpretation of the various SCSP campaigns and brands in each of the towns. As a result, we present here for comparison the data from three comparator areas<sup>12</sup>. This allows us to see how things have changed. However, we can compare the town responses to those in the comparator sample in order to see whether, even in those towns without an SCSP programme, people still perceive improvements to have taken place and recognise a local campaign. This also helps us to control for survey bias in these types of questions<sup>13</sup>.

## Perceptions of improvements to transport infrastructure and services

7.2 Figure 7.1 compares scores for Larbert/Stenhousemuir and the comparator sample on various questions about infrastructure and service improvements. It can be seen that, compared to the comparator, Larbert/Stenhousemuir residents are much more convinced that their town has witnessed improvements to various transport related services. Most notable is the much greater acknowledgement that pedestrian facilities and cycling facilities have been improved. Parking management generated the most ambivalent response.

### Awareness and understanding of the SCSP programme

- 7.3 In order to gauge how much people recognised the branding that had been used during the SCSP programme, respondents were asked if they had heard of the Take the Right Route Larbert/Stenhousemuir action (or an equivalent campaign in the control town)<sup>14</sup>. Figure 7.2 shows that 63% said they had heard of the campaign, compared to only 10% in the comparator sample. Likewise, 71% recognised the logo for these campaigns, compared to 22% in the control.
- 7.4 Respondents were also asked what they thought the campaign was about and were given a number of options or an 'other' option. Figure 7.3 shows that the campaign in Larbert/Stenhousemuir was either thought to be about encouraging people to be more active or about getting people to use cars less. In the comparator sample, people thought the campaign was more to do with encouraging bus use and much less to do with encouraging physical activity.

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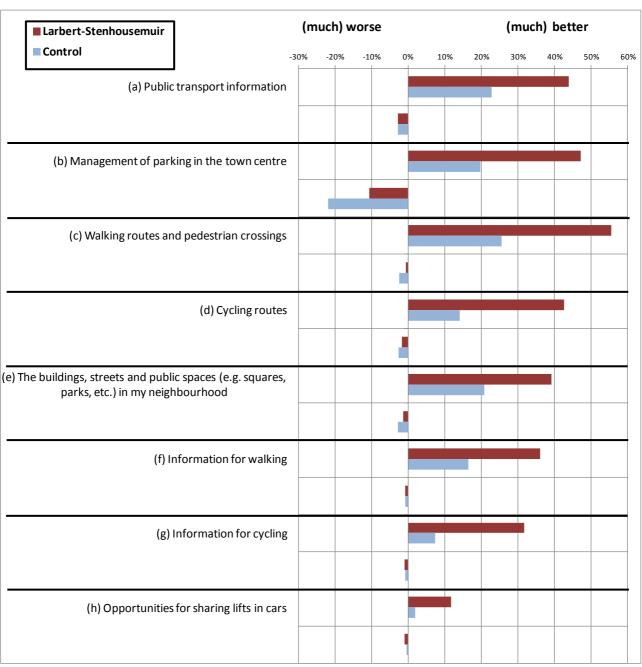
58

<sup>&</sup>lt;sup>12</sup> With weightings applied so as to ensure the same demographic matching from the samples thus creating one overall 'comparator' score. See the main report for an explanation.

<sup>&</sup>lt;sup>13</sup> i.e. the idea that a proportion of people are likely to say they recognise something even when they don't and we assume this tendency is the same in both the SCSP area and the comparator towns.

<sup>&</sup>lt;sup>14</sup> Arbroath: Travelwise Angus; Bearsden: Stepchange; Dalkeith: Travel wise.

Figure 7.1 - Comparison of perceived changes to infrastructure and services in Larbert/Stenhousemuir and control town

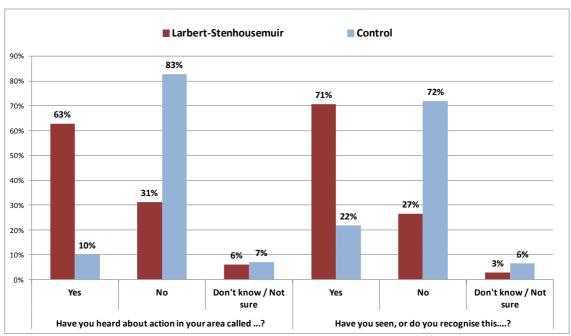


Household survey samples of N = 1045 (for Larbert/Stenhousemuir weighted in 2012) and N = 2316 (for Control weighted in 2012) Samples for individual questions vary. The above analysis misses out the 'neutral' and 'don't know' scores.



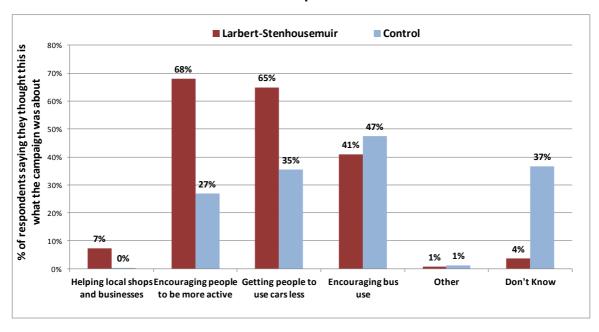


Figure 7.2 - Recognition of the SCSP brand in Larbert/Stenhousemuir and in the comparator sample



Household survey samples of N = 1045 (for Larbert/Stenhousemuir weighted in 2012) and N = 2316 (for Control weighted in 2012) Samples for individual questions vary.

Figure 7.3 - Recognition of the SCSP message in Larbert/Stenhousemuir and in the comparator sample



Household survey samples of N = 1045 (for Larbert/Stenhousemuir weighted in 2012) and N = 2316 (for Control weighted in 2012) Samples for individual questions vary.





# 8.0 Likely impacts of the Larbert/Stenhousemuir SCSP programme

- 8.1 The SCSP programme implemented in Larbert/Stenhousemuir sought to change travel attitudes and behaviour to support a number of policy objectives. The monitoring and evaluation activities were unable to measure impacts directly, as changes in the local economy and society are affected by many factors. The assessment of impacts is therefore derived from the travel attitude and behaviour surveys and associated data collection activities.
- 8.2 The impact summary table in Table 8.1 gives an indication of where the potential impacts are likely to lie, with qualitative commentary based on the evidence collected in the monitoring and evaluation exercise. This is divided into five key areas:
  - Economy
  - Accessibility
  - Environment
  - Health and integration with other social issues
  - Safety

Table 8.1 – Potential impacts of the Larbert/Stenhousemuir SCSP Programme

| Policy aim                                   | Direction of         | Commentary   |
|--|----------------------|--|
|  | impact relative      |  |
|  | to policy aims       |  |
| Economy                                      |                      |  |
| Reducing the cost of travel                  | Positive             | Travel cost has reduced significantly with the fall in car usage with modal shift to walking. The increases in road congestion in the area due to development pressures would have made costs higher for many outside the area so the benefits are much wider than simply within the pilot area. |
| Travel time savings                          | Negative/<br>Neutral | <ul> <li>The significant increase in the proportion of trips made on foot, many of which have been mode shift from car, result in significant increases in travel time.</li> <li>Travel time savings as a result of reduced congestion are a benefit.</li> </ul>                                 |
| Net benefits to transport operators          | Neutral              | There has been a small and insignificant increase in bus usage some of which could be fare paying passengers.  |
| Wider economic benefits and location impacts | Positive             | Larbert/Stenhousemuir town centre has performed well with<br>more local walk in trips to stores in the local centre.   |





| Policy aim                                 | Direction of        | Commentary  |  |
|--|---------------------|---|--|
|  | impact relative     |   |  |
|  | to policy aims      |   |  |
| Accessibility                              |                     |   |  |
| Access to opportunities                    | Positive            | The new core path network has improved access to the hospital and the countryside and there have been some improvements in access to local shops and services, partly compensating for the fall in local access as a result of difficulties crossing busier roads associated with new development in the area.            |  |
| Social inclusion and community development | Positive            | <ul> <li>Community based activities have developed and the role of<br/>the football club has been particularly beneficial.</li> <li>The community champions have been a key success.</li> </ul>   |  |
| Environment                                |                     | ·   |  |
| Emissions                                  | Positive            | Reductions in car trips have led to small reductions in greenhouse gas emissions.   |  |
| Air quality impacts                        | Neutral             | None identified.  |  |
| Cultural heritage and townscape            | Neutral             | None identified.  |  |
| Integration with H                         | ealth, Regeneratio  | n and other Policy  |  |
| General health                             | Neutral             | No significant changes identified.  |  |
| Physical activity levels                   | Neutral             | There has been a significant fall in levels of activity despite the rise in walking. The focus group evidence suggests that this is due to more people now working in jobs that require less exercise, and is a characteristic of the local development and population increase, so is not related to SCSP interventions. |  |
| Regeneration and land use planning         | Positive            | The focus on short trips to the town centre has probably supported local shops.   |  |
| Political value of changes                 | Neutral             | Not identified.   |  |
| Safety                                     |                     |   |  |
| Personal security Road safety              | Neutral<br>Positive | <ul><li>Not identified.</li><li>People have particularly supported safety benefits of paths</li></ul>   |  |
|  |                     | and training but there remain concerns about road safety for pedestrians and cyclists .   |  |







## 9.0 Learning Points

- 9.1 The project has had a clear focus to target car journeys of less than 5 miles using a package of measures. This focused approach appears to have been effective in its aims.
- 9.2 Key learning points have been that:
  - Good value depends on getting the right balance between background marketing and targeted promotions. Local, targeted and consistent branding, such as banners in the town and wrapping of buses, kept the message alive locally throughout the programme.
  - Local press coverage is critical to make the best value from a marketing campaign. It
    can be difficult to get positive press coverage if news is managed through the local
    authority press teams. Positive stories are much more likely to emerge from within
    the community such as the successful schools initiatives. By working in partnership
    with other organisations like the Football Club, positive relationships with the
    media were built upon.
  - Marketing of the Campaign helped to promote business travel plans. The availability
    of personal support services from travel advisors, and the effective use of planning
    policy using Section 75 Agreements, have been key factors in the success but more
    needs to be done, particularly given the scale of land use development in the area.
  - Working through other organisations helped to give access to target groups. The support from Stenhousemuir football club encouraged more young people to travel more actively and NHS Forth Valley allowed new residents to be provided with additional information about local services and facilities.
  - Cycle maintenance and promotion was best managed as a personalised follow up to another activity like PTP rather than through separate events. Similarly with cycle training it was important to integrate this into other activities and events rather than as a stand-alone service.
  - PTP proved to be a valuable tool for community engagement/consultation, recruitment of community champions and delivering targeted monitoring of travel trends. User feedback on PTP suggests that the PTP prompted behaviour change and awareness of information about active travel and public transport improved.
  - Walk & Talk also helped to recruit Community Champions and volunteers and proved to be a relatively low cost approach for working with community partners.





9.3 To make the most of the pilot project in the future it will be important to further develop engagement with the community and businesses through the identified champions so that they can continue to be actively involved in promoting Take the Right Route.



