

The Scottish Government

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

Going Smarter in Glasgow

Final Report

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Contents

| | |
|--|-----------|
| <i>EXECUTIVE SUMMARY</i> | <i>iv</i> |
| <i>1.0 Introduction</i> | <i>1</i> |
| <i>2.0 Summary of Initiatives and Costs</i> | <i>2</i> |
| Management | 3 |
| <i>3.0 Background to the Programme and Parallel Activity</i> | <i>6</i> |
| Previous activity..... | 6 |
| Parallel activity to SCSP 2009-2012 | 6 |
| <i>4.0 Outputs from SCSP Delivery</i> | <i>8</i> |
| New Path Infrastructure | 8 |
| Signage..... | 9 |
| Marketing Active Travel..... | 9 |
| Cycle Promotion..... | 13 |
| Processes of Change from Focus Group Evidence | 15 |
| <i>5.0 Travel Behaviour Outcomes</i> | <i>17</i> |
| Household travel survey | 17 |
| Household survey sample characteristics | 18 |
| Modal split of journeys from the Travel Diaries | 20 |
| Modal split of journeys by gender | 22 |
| Modal split of journeys by age | 23 |
| Modal split of journeys by journey purpose | 24 |
| Modal split of journeys by household car ownership | 26 |
| Modal split of journeys by weekday/weekend | 27 |
| Self-reported frequency of use of each mode | 28 |
| Multi-modal travel behaviour..... | 30 |
| Demographic differences in behaviour | 31 |
| Self reported change in mode use over the past 12 months | 34 |
| Self reported change in mode use related to ‘life events’ | 37 |
| Pedestrian and Cycle Count Data | 38 |
| School Travel..... | 41 |
| Bus patronage data..... | 42 |
| Road traffic | 42 |

| | |
|--|----|
| Summary of travel behaviour outcomes | 43 |
| 6.0 Attitudinal Outcomes..... | 46 |
| Attitudes to the car..... | 46 |
| Attitudes to the bus | 48 |
| Attitudes to walking..... | 50 |
| Attitudes to cycling | 51 |
| Attitudes to the environment..... | 51 |
| Attitudes to the local neighbourhood | 52 |
| Self-reported health and physical activity | 54 |
| 7.0 Awareness Outcomes | 59 |
| Perceptions of improvements to transport infrastructure and services | 59 |
| Awareness and understanding of the SCSP programme..... | 59 |
| 8.0 Impacts of the Glasgow East End SCSP Programme..... | 63 |
| 9.0 Learning Points | 65 |

EXECUTIVE SUMMARY

This report describes the monitoring and evaluation results for the “Glasgow On the Move” programme, which encompassed a range of infrastructure and behavioural change measures to encourage more sustainable travel choices in Glasgow East End.

Infrastructure and promotion initiatives were delivered as planned. Infrastructure initiatives improved the walking and cycling infrastructure using £2m of the £2.5m total budget for this investment. Promotion activities were focussed on encouraging more walking and cycling. There was significant partnership working to deliver the programme, including working with local cycling organisations and schools.

There have been some significant travel behaviour changes as follows:

- There has been a significant increase in walking.
- There were significant falls in bus and train travel, which residents say has been to save money by walking rather than paying fares.
- There was a significant increase in the proportion of trips made as passengers in cars.

There have been major changes from wider development and infrastructure which will also have affected travel behaviour. The opening of Clyde Gateway on the 26 April 2012 was just prior to the household surveys, and only at this point were the connections from the SCSP infrastructure to Clyde Gateway completed. There are other developments that serve the area that are in the process of being completed in the run up to the Commonwealth Games so the full effects will take longer to emerge. The Emirates Arena opened after the 2012 survey data was collected.

In terms of physical activity levels, there was a reduction in the proportion of people reporting that they reached the physical activity target (30 minutes moderate exercise most days), down from 30% in 2009 to 22% in 2012.

The attitudinal research activities showed that:

- Over the 2009-12 period perceptions of car travel became more positive and this could be partly related to the substantial road investment made during the pilot period and partly since car use was seen as desirable since it was unaffordable.
- Despite the reduction in bus travel, attitudes improved in relation to reliability and perceptions of personal security. However, there was a notable reduction in the number of people who said that bus fares are about right.
- More people in 2012 believed that facilities for pedestrians are good.
- There was a positive shift in attitudes towards cycling, including the idea that it is a healthy way to travel around.
- Focus groups showed that training activities and road safety measures were generally supported throughout the project. There continues to be concern about personal safety in the area and private transport like car and taxi are viewed as the safest ways to travel.

- Perceptions of the local neighbourhood improved and the perceived improvement in the built environment was particularly strong when compared against the comparator sample.

Awareness of the “Glasgow On the Move” programme in the 2012 household survey was very low, with only 7% of respondents saying that they had heard of the campaign. More people recognised the logo, but overall the low level of recognition seems to be related to a lack of understanding or acceptance of the campaign messages.

The project has delivered some positive impacts against key policy objectives by reducing travel costs, supporting community development, reducing emissions, supporting regeneration of the area and improving road safety.

Key learning points relate to working with communities, working with partners in other sectors and supporting local community groups to build trust, investing in solutions that the local community supports. The SCSP pilot has paved the way for the large smarter choices programme now being planned in the area for the Commonwealth Games.

1.0 Introduction

- 1.1 This report describes the monitoring and evaluation results for the “Glasgow On the Move” programme, which encompassed a range of infrastructure and behavioural change measures to encourage more sustainable travel choices in Glasgow East End. This report describes the planning, development, management, delivery and monitoring of a programme of measures in Glasgow 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 Smarter Choices Smarter Place (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 describes the SCSP initiatives, their costs and dates of delivery. Glasgow East End On the Move represents a total investment of £2.5 million, of which £1.3 million came from the Scottish Government funding.

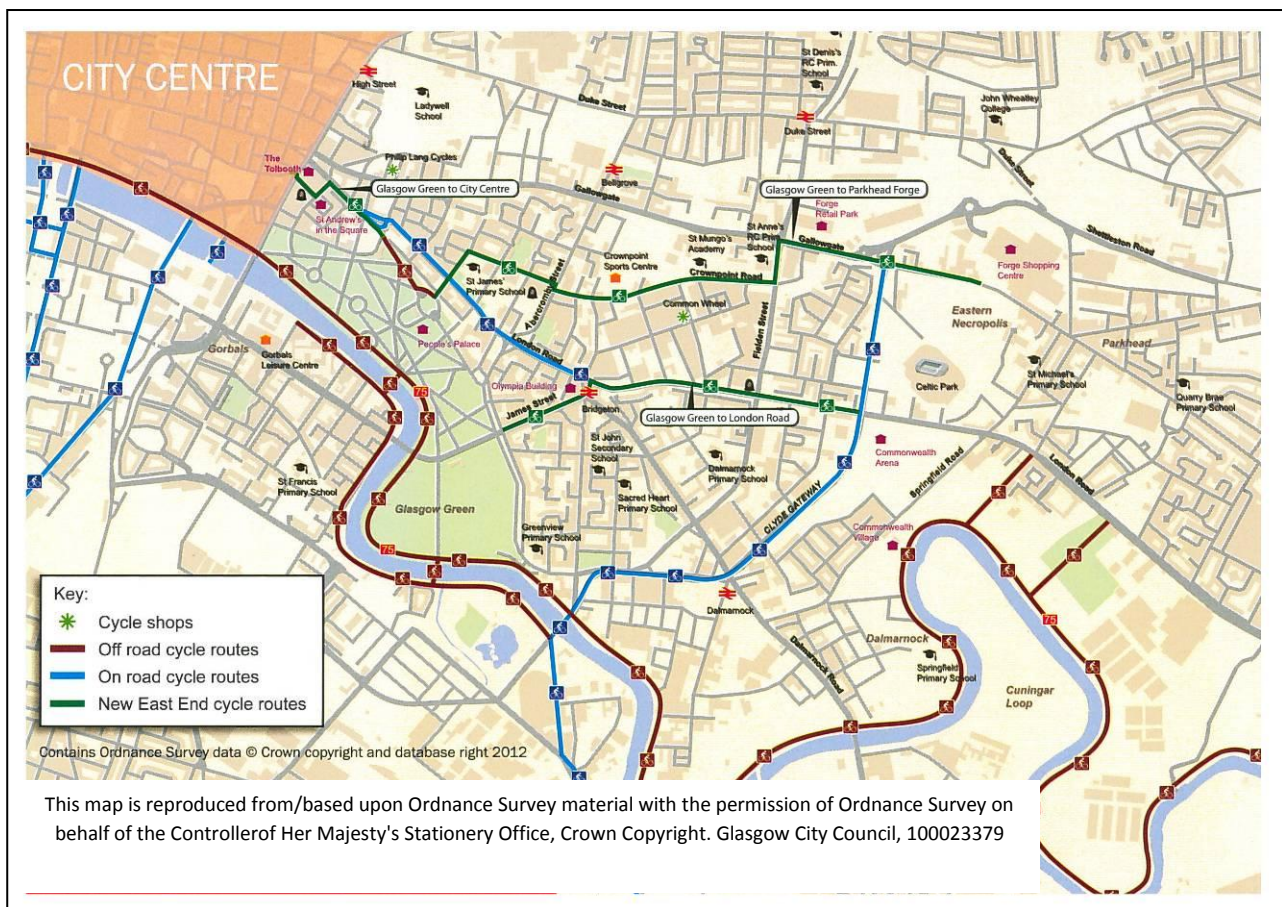
Table 2.1 – Initiatives Summary

| Category | Initiatives delivered | Start and end dates | Outturn Cost |
|---------------------------------|---|------------------------------------|--------------|
| Provision | | | |
| Public transport provision | None | | |
| Infrastructure provision | Central Station to Games Village (via Clyde Walkway NCN route 75) | Jan 2011- April 2012 | £250,000 |
| | Glasgow Green to Games Village (via James Street and London Road) | | £800,000 |
| | Merchant City to Parkhead Cross (via Gallowgate) | | £950,000 |
| Promotion | | | |
| Campaigns | Behaviour change campaign and marketing and awareness raising campaign | April 2010 – March 2011 | £72,000 |
| | Schools bike loan scheme in all areas primary schools | April 2011 – Mar 2012 | £25,000 |
| | Work with schools and other community organisations | | |
| Travel information | Pedestrian and cycle signing | Jun 2012 | £50,000 |
| Car and lift sharing | Internet based public car share journey matching system | | £2,000 |
| General active travel promotion | Part of behaviour change campaign – Cycle To School campaign Walk/cycle journey planners | June 2010 June 2011 June2012 | £50,000 |
| Cycle promotion | Cycle training and organised rides | Nov 2011- April 2012 | £55,000 |
| Travel planning | Part of Campaigns | Not pursued. | |
| Personalised travel planning | None | | |
| Training and events | Common wheel training as part of rehabilitation | Part of campaigns | |
| Management and organisation | Project Management / Liaison / Design | April 2009 – March 2012 | £246,000 |

Management

- 2.2 The bulk of the implementation of these initiatives did not start until January 2011, so there has only been a short timescale for any impacts to be made. However some progress was made in working with schools and community groups prior to this in 2010.
- 2.3 More generally, Glasgow East End continues to change relatively faster than in some of the other SCSP areas due to major regeneration works and preparation works for the Commonwealth Games. The pilot started largely as a means of complementing the infrastructure works for the Commonwealth Games. As it developed it introduced marketing and promotion measures to back up the delivery of the improved infrastructure, helping to pave the way for the extensive smarter choices programme now planned for the Games.
- 2.4 The Council report that they see SCSP as part of a process of culture change in attitudes to partnership working between local public agencies and with transport operators. The current programme takes this into new areas engaging with the Glasgow East End Delivery Agency through a Partners group, and local interest groups.
- 2.5 Figure 2.1, shows the Glasgow East End area and the improvements made to the three cycle routes leading from the city centre to the East End. This includes the implementation of segregated cycle facilities along two key corridors and further pedestrian and cycle enhancements throughout the project area. Following consultation with the community, and traffic survey data collected by the Council, the project comprised an upgrade of cycle route NCN75, a segregated cycle route from Glasgow Green to the Commonwealth Arena (via James Street and London Rd), and a segregated cycle route from Glasgow Green to Parkhead Forge (via Crownpoint Road and Gallowgate). The Clyde Gateway road incorporated cycle lanes along its length linking the National Cycle Network to the SCSP route on London Road.

Figure 2.1 – Location of Walking and Cycling Corridor Upgrades



- 2.6 These infrastructure improvements are complemented with pedestrian and cycle signing, a travel behaviour change campaign 'East End on the Move', and outreach work with schools and other community organisations. Through many years of developing cycling facilities within the city, and working with local cycling organisations, schools and community organisations, Glasgow City Council had a good network of local contacts. This list was supplemented by agencies that were known to the regeneration agency and the CTC Bike Club. Only organisations on the target list were invited to bid for grants from the Smarter Choices Smarter Places Community Cycling Fund. This was done to keep the project manageable, reduce the scope for potential abuse of the funding scheme, and ensure best value for the funding that was available. All bids were initially scrutinised by officers from Glasgow City Council. Where necessary, a dialogue developed between the Council officers and the applicant to ensure that bids were shaped to maximise their appropriateness, potential benefits and value for money. Once Council officers were satisfied regarding the credibility of the bid, it was then submitted to the Smarter Choices steering group for approval. Successful applicants were notified and provided with a blank template for submission of a final report upon completion of their project.

- 2.7 A second round of funding was available during 2011/12. This funding was offered to the organisations who had successfully taken forward projects during the first allocation, to enable them to extend their projects and capitalise on the benefits. These included training and organised rides such as the event shown in Figure 2.2.

Figure 2.2 – Cycle Training and Organised Rides



- 2.8 The new arterial road named Clyde Gateway (East End Regeneration Route, Phase 2) opened to traffic in April 2012 providing segregated cycle facilities in both directions. The two segregated routes which were developed as part of the SCSP project link in to this road and several key sites for the 2014 Commonwealth Games, including the Commonwealth Arena, Sir Chris Hoy Velodrome, and the Commonwealth Village. The London Road segregated cycle route also connects these facilities to the city centre via Bridgeton Cross and Glasgow Green.

3.0 Background to the Programme and Parallel Activity

Previous activity

- 3.1 Glasgow City Council published a transport strategy for 2007 to 2009 to keep Glasgow Moving. This included plans to provide a network of pedestrian and cycle routes both on and off road to link up communities and encourage more people in Glasgow to lead active lives. The design, implementation and maintenance of the walking and cycling routes are an important factor in encouraging people to walk or cycle.
- 3.2 The strategy highlighted steps to improve cycling infrastructure to ensure that cycle routes are continuous, allowing cycle trips to be conducted safely for the journeys people wish to make. The strategy seeks direct routes with minimum displacement from desire lines and with routes free from parked vehicles and minimising wait times at signalised crossings. Improved facilities seek to infill gaps in existing provision and take into account the effects of the severance effects of busy roads.
- 3.3 The SCSP investment was planned to implement this strategy within the East End. As this was a new strategy the plans for the East End were to establish a new network. Both the cycle route construction and the promotional activities to support the network development were piloting new types of transport delivery, recognising the forthcoming challenge to deliver the Commonwealth Games in the area.

Parallel activity to SCSP 2009-2012

- 3.4 SCSP forms a relatively small part of a wider programme to regenerate Glasgow's East End. The Clyde Gateway regeneration programme seeks to transform the image, perception and fortunes of the area and seeks over a 20 year period until 2028 to achieve social, economic and physical change in one of Europe's most deprived areas. The investment includes not just physical investment in key sites, new houses and new jobs, but training and community development programmes for current and new residents.
- 3.5 The construction of the M74 and Clyde Gateway is the largest transport investment, creating new roads North / South and East / West. The M74 Completion project completes the missing link between the end of the M74 at Fullarton Road Junction near Carmyle and the M8 motorway west of Kingston Bridge near Glasgow city centre. Construction work on the road began in May 2008 and was completed in 2011.
- 3.6 The parallel roads projects overlap with many of the SCSP goals to:
- reduce traffic congestion on roads across Glasgow;
 - improve road safety by reducing road accidents;
 - help with the Clyde Gateway regeneration and play a key role in the Transport Plan for Scotland's delivery of the Commonwealth Games in Glasgow 2014; and

- Reduce traffic volumes on the surface street network making them safer and offering the ability to encourage more sustainable forms of transport.

3.7 The Clyde Gateway Route is a 5.3km long, 4 lane single carriageway distributor road complementing the M74 Completion, and Phase 1 was completed in April 2010. Phase 2 stretches 2.6km between Phase 1 Rutherglen Bridge (at Shawfield Drive) to Biggar Street and was opened in April 2012. Like the M74 the stated aims are similar to the SCSP programme to:

- Improve pedestrian routes and cycle paths.
- Relieve traffic congestion and improve road safety.
- Facilitate the regeneration of derelict land and support the creation of jobs.
- Improve the local environment by reducing the potential for localised flooding.
- Improve access to 2014 Commonwealth Games venues and the athletes' village.

3.8 Hosting the 2014 Commonwealth Games in Glasgow will be a challenge for the area and the new sports facilities and the Athletes' Village are to be constructed in the heart of these communities. Preparing for this economic and social change is an ambitious programme of which SCSP forms one part.

4.0 Outputs from SCSP Delivery

New Path Infrastructure

- 4.1 The Clyde Walkway/National Cycle Route 75 (Glasgow Green to Commonwealth Village) upgrade involved vegetation clearance to improve visibility and lighting. Following the site clearance works, resurfacing of the paths was carried out to improve the surface for pedestrians and ride quality for cyclists.

Figure 4.1 – The Clyde Walkway Path



- 4.2 The Glasgow Green to Commonwealth Arena path via James Street and London Road has involved improving James Street between Glasgow Green and Bridgeton Cross by widening the footway to provide a shared (segregated) surface. On London Road, from Bridgeton Cross to the Commonwealth Arena the investment has provided a new two-way segregated cycle route by removing one traffic lane at the western end. These works incorporated lighting and footway improvements along the length of the route.

Figure 4.2 – Glasgow Green to Commonwealth Arena



- 4.3 Glasgow Cross to Parkhead Forge via Crownpoint Road and Gallowgate improvements have provided a segregated two-way cycle lane on St Andrews Street, James Morrison Street and London Road to Charlotte Street then the route mounts the footway and becomes a shared surface into Glasgow Green.
- 4.4 From Glasgow Green, at the northern exit adjacent to the People's Palace, the route continues to Parkhead Forge via a shared surface along Morrison Place, Claythorn Park, Stevenson Street then Crownpoint Road past the East End Healthy Living Centre to Gallowgate then ending at Parkhead Forge.
- 4.5 The works incorporated lighting and footway improvements along the length of the route.

Signage

- 4.6 Walk and cycle signs were provided at 82 locations. This was planned in consultation between Glasgow City Council (GCC), NHS Greater Glasgow, Strathclyde Partnership for Transport, Glasgow Life and Glasgow 2014 Legacy Team. The signs display local destinations and indicative journey times for pedestrians and cyclists. This was a decision taken by the steering group to help quantify how little time commitment would be required to walk or cycle to their destination rather than taking the bus or car. It is hoped that by showing a time, more people will be encouraged to actively travel. The signs were installed in the Spring of 2012.

Figure 4.3 – New Signposting showing walk and cycle times



Marketing Active Travel

- 4.7 The marketing campaign began with a five day launch with a manned travelling display visiting five locations in the East End, with the aim of promoting brand awareness,

encouraging active and sustainable transport, providing the public with an opportunity to receive travel information and discuss any travel difficulties with staff from GCC Land & Environmental Services. In particular, officers were able to talk to the public about desired walking and cycling routes through the East End and receive feedback regarding the three proposed routes suggested for development or upgrade.

- 4.8 The venues chosen were selected to access a cross section of residents and visitors to the East End. The campaign opened with the display located at the Forge, the main shopping and leisure centre in the East End. The second day was held in the East End Healthy Living Centre. This sports and leisure centre enabled LES officers to speak to people who were already active, but who were perhaps not utilising active and sustainable travel modes for transportation, but who would be receptive to the idea. A local community centre hosted the display on the third day. The centre was located in one of the more deprived areas of the East End and used for running employment skills training courses, but also visited regularly by people with addictions. On the penultimate day, the People's Palace and Winter Garden was used. This local recreation and tourist attraction is frequented by local school groups, trips out by community groups, as well as an international audience. The last day used the offices of a local regeneration agency, since they were located at the hub of one of the local communities, for citizens visiting consultation plans and displays.

Figure 4.4 –Cycle Event at the Forge Shopping Centre



- 4.9 Beyond the launch week, the first phase of the campaign targeted schools, running from Easter 2010 to June 2010. This was an intensive marketing campaign aimed at

encouraging drivers to drive responsibly in the vicinity of schools, to establish cycle friendly zones outside schools. In particular the message 'Give me Cycle space' was pushed. The campaign was supported by billboard posters at the roadsides, flags on lighting columns immediately outside schools, bus stop advertising and adverts on bus rears, radio adverts, chalk marking outside school entrances, a mountain biking stunt show, travel planning sessions in selected schools, and an invitation to selected schools to participate in a mountain biking challenge event within a nearby country park.

- 4.10 Participation in Cycling Scotland's 'Give me cycle space' campaign was repeated in 2011 and 2012.
- 4.11 The more general public awareness campaign followed on from the schools element, with attendance at public events during the summer months (and at frequent occasions throughout the campaign). Billboard advertising was undertaken between August 2010 and September 2010. The main strap lines used highlighted the price of fuel, and the cost savings that can be made through active travel.
- 4.12 These messages were repeated between February 2011 and March 2011. In addition to the billboard messages, a large scale building banner was erected that covered part of the front of the Olympia building at Bridgeton Cross. The building banner was displayed from September 2010 until March 2011 as shown in Figure 4.5

Figure 4.5 – Banner at Bridgeton Cross



- 4.13 Five areas were identified for the erection of flags on lighting columns. Given the limited amount of space available on the flags, the messages were kept short, but the flags were set out in rows of five, with the two end banners carrying the Glasgow East End on the

Move branding. The flags were erected at the beginning of December 2010 and were scheduled to remain until September 2011, but remained in place during 2012.

Figure 4.6 – On the move Flag



- 4.14 Bus rear advertising was started in March 2011 and scheduled for 6 months. Three complete bus rears were covered in graphics. By the summer of 2012 some of these buses were still carrying the advertising.

Figure 4.7 - Bus Rear Advertising



- 4.15 During the community consultation it was established that two local newspapers attracted the widest readership, the 'East End Regen' and the 'East End Outlook'. The papers were provided with regular updates as to the progress of the SCSP project. To gain the support of these papers a four page wrap was funded and produced for each newspaper, reviewing the campaign highlights, physical work undertaken, community grants given out, providing advice on active and sustainable transport, sketches of the proposed routes and how they interlink, advertising for the East End on the Move strap lines. The East End Regen wrap was published during March 2011 with the East End Wrap published during June 2011.
- 4.16 Use of marketing media peaked during summer 2010 and spring 2011. Less marketing was used during the winter periods. The culture change within the Council was also assisted through the campaign identity with partners engaging at various events.

Cycle Promotion

- 4.17 Cycling has been promoted by working through partners in the area during 2010/11 and 2011/12 with the level of activity spread across this period.
- 4.18 Community groups were given contact details of the schools and encouraged to work closely with them. Good linkages were then made between community groups and the schools assisting the schools with an additional resource to help with cycling activities.
- 4.19 The main initiatives delivered through the partners include:
- Glasgow Bike Station delivered the Bike Cascade event with servicing and swap of 50 bikes. Children were given free helmets and locks. 36 other bikes were checked as part of a Dr Bike service. Tools were purchased and bike rides organised by qualified cycle leaders. Cycling proficiency was administered including the purchase of 18 bikes and equipment for instructors. A grant of £4,325 was awarded from the SCSP budget.
 - The Bike Station also delivered the Bikeability project purchasing bicycles and cycle equipment to enable cycling proficiency to be taught in schools. Although initially only two schools were contacted, the training programme was rolled out to other schools during 2012.
 - During 2012, The Bike Station ran four courses to 'Build your Bike' involving 24 people. At the end of the course participants will have the opportunity to join a mountain biking training session at a local venue.
 - Common Wheel have helped to provide cycle training to 27 non-cycle owners to build their own bike in a fully functioning workshop and then offer low risk bike skills training. This sought to increase self-confidence and awareness, thereby help combat the fear of traffic.

- A second grant was awarded to Common Wheel during March 2012. This grant was aimed at enabling the charity to expand their West End workshop.
- Freewheel North, a cycling charity operating in the SCSP area, were funded to help establish a cycling centre in Glasgow Green primarily aimed at helping people with disabilities to cycle. Schools have also been helped with a programme of led rides for pupils of Eastbank Academy, Whitehill Secondary and St Mungo's, with additional led rides for youth groups such as Playbusters and the Easterhouse Phoenix Project.
- Freewheel North, undertook a cycling and access audit, on behalf of the Council, looking at small scale physical measures which could be implemented to tackle barriers to walking and cycling such as the need for dropped kerbs. Over 50 measures were identified and these were resolved where feasible solutions could be identified. This proved an excellent way of obtaining local knowledge and supporting the community to help deliver SCSP.
- Ally Park Bike Club were funded to support the development of cycling projects and purchase 12 bikes for lending out, staff training courses, cycle skills training, cycle maintenance sessions and displays.
- Five schools applied for funding to enable staff to attend cycle training courses, or asked for work to be undertaken on their premises, such as installation of secure, sheltered cycle parking.
- Reidvale Youth'n' Action project purchased 6 bikes and equipment, and offered weldtech training and cycle training and was carried out through a partnership with the CTC Bike club project.
- Dalmarnock Centre provided a Trail Leaders courses, and purchased adult and child tricycles.

4.20 It can sometimes be difficult to engage in Glasgow's East End with its tight knit community but working through these local charities proved to be highly successful. The local people supporting initiatives ensured that the initiatives were accepted as coming from the community. Also by supporting these local groups financially the Council helped to invest in local community capacity helping these groups to thrive.

4.21 The community groups already had visions relevant to the local area. For example, Freewheel North have a vision for "cityscape fit for all members of society in which streets thrive with play, enterprise and health, where walking and cycling are the principal means of transport, and where human values are embodied in the architecture". This broad goal is very similar to SCSP aims and the charity was founded around the same time as SCSP started and is based on Glasgow Green close to the pilot area.

4.22 The synergies between the development of these community groups, and the delivery of SCSP aims, appear to have been important for the success of the Glasgow East End pilot.

The Council has been perceived as being more responsive to community wishes and the local groups report that their efforts appear to be making a difference¹.

Processes of Change from Focus Group Evidence

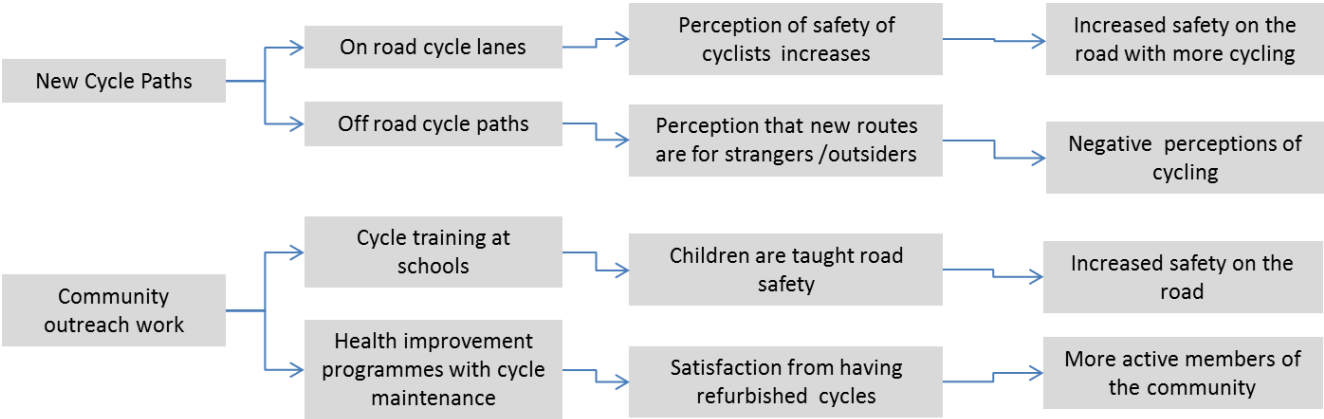
- 4.23 Two focus groups were undertaken in the area to explore how local people perceived the recent changes. The focus groups include research to obtain unprompted feedback on the changes and also prompted responses on how people had reacted to each element of the recent investment.
- 4.24 The focus group findings are reported in detail separately but Figure 4.8 summarises the main mechanisms identified by participants where the SCSP investment was perceived to impact on the area.
- 4.25 The dominant views from the focus groups were that the major threats to employment, community development, and environmental enhancement in the area came from personal security issues. Anything that helped to make the area safer was seen as relevant, particularly where this involved tackling the causes of the personal security problems such as drugs issues and low aspirations amongst some residents. Security and training aspects of the SCSP investment were therefore valued most highly.
- 4.26 Cost factors emerged as the most important influence over travel choices with several participants stating that many people don't have the money to afford to travel by bus. Some people reported that they were walking more than they used to.

"You've got an area where transport is seen as a luxury, people already on the borderline aren't going to want to pay too much for transport. If they can walk, they will"

- 4.27 Positive mechanisms for change were identified through schools and community groups building on the pride in the community that everyone sticks together and supporting people with training and skills.
- 4.28 The need for investment in the build environment was viewed more positively so on road cycle investment contributed positively to the local streetscape. In contrast, the new off road cycleways were viewed by focus group participants as being a security threat allowing gangs to escape more easily from police so were unanimously opposed by all focus group participants. It must be appreciated that the Commonwealth Games developments are only partly completed and the off road routes will be seen as better integrated once complete so these perceptions are likely to change.

¹ Freewheel North 2011 (revised 2012) Cycling and Access Audit.

Figure 4.8 - Mechanisms for Change identified in Focus Groups



5.0 Travel Behaviour Outcomes

- 5.1 The infrastructure and connections to Clyde Gateway were completed after the 2012 household surveys and a number of developments, such as the Emirates Commonwealth Arena Stadium are being completed after the surveys. The full effects of the SCSP investment are unlikely to be realised for some time. Therefore the travel behaviour changes reported in this chapter show only part of the picture that could emerge over time as the SCSP investment is viewed within its setting as part of the Commonwealth Games infrastructure.

Household travel survey

- 5.1 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. The survey approach is described in the Final Evaluation Report.
- 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 1365 Glasgow East End respondents in 2009 and 1044 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 Glasgow East End 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) Glasgow East End in 2009 and 2012

| | 2009 sample (%) | 2012 sample (%) | Population (where available, see footnote) (%) |
|--|-----------------|------------------------------|--|
| Gender | | | |
| Male | 47.3 | No change (due to weighting) | 47.4 |
| Female | 52.7 | | 52.6 |
| Age | | | |
| 16-24 years | 13.9 | No change (due to weighting) | 14.0 |
| 25-34 years | 20.8 | | 21.0 |
| 35-44 years | 15.4 | | 15.5 |
| 45-54 years | 15.3 | | 15.4 |
| 55-64 years | 16.5 | | 16.4 |
| 65-74 years | 9.5 | | 9.1 |
| 75+ | 8.6 | | 8.5 |
| Economic Status* | | | |
| Employed Full Time + Self-employed | 24.2 | 23.3 | 32.0 |
| Employed Part Time | 7.6 | 8.4 | |
| Not employed | 67.5 | 68.0 | |
| Household composition* | | | |
| Adults living as a couple/ married | 49.0 | 42.6 | |
| House-share | 4.3 | 2.7 | |
| Single Adult household | 46.2 | 54.6 | |
| Other | 0.6 | 0.0 | |
| Presence of Children | | | |
| With children | 24.4 | 23.2 | |
| Without children | 75.6 | 76.8 | |
| Illness and Disability* | | | |
| With | 25.5 | 32.0 | |
| Without | 74.5 | 68.0 | |
| Household income (annual, gross)* | | | |
| Less than £14,999 | 77.6 | 57.2 | |
| £15k - £19,999 | 12.5 | 18.4 | |
| £19k - £29,999 | 8.0 | 13.9 | |
| £30k - £39,999 | 1.5 | 5.9 | |
| £40k - £59,999 | 0.4 | 3.6 | |
| £60k or more | 0.0 | 0.9 | |
| [Refused/ missing] | [27] | [44] | |

| | | | | |
|---|--|------|------|------|
| Education* | No Qualifications | 43.7 | 42.1 | 51.0 |
| | School leaving certificate | 11.1 | 5.0 | |
| | O Grade, Standard Grade, GNVQ equivalent | 29.5 | 37.2 | |
| | Higher, A Level or equivalent | 7.4 | 7.0 | |
| | Degree/Professional | 8.2 | 8.7 | |
| Ethnicity | White | 97.6 | 98.0 | |
| | Asian | 1.2 | 0.5 | |
| | Black | 1.0 | 1.4 | |
| | Mixed | 0 | 0.1 | |
| | Other | 0.2 | 0.0 | |
| Household car ownership* | None | 69.9 | 73.7 | 65.0 |
| | 1 | 28.5 | 23.8 | |
| | 2 | 1.7 | 2.0 | |
| | 3 or more | 0.2 | 0.5 | |
| | | | | |
| Driving licence* | Yes | 32.1 | 28.1 | |
| | No | 67.9 | 71.9 | |
| Adult bicycle ownership*² | None | 88.4 | 75.8 | |
| | One | 8.9 | 13.1 | |
| | Two | 2.2 | 9.5 | |
| | Three or more | 0.5 | 1.6 | |
| | | | | |
| Children bicycle ownership | None | n/a | 83.8 | |
| | One | | 8.9 | |
| | Two | | 5.8 | |
| | Three or more | | 1.4 | |
| | | | | |
| Concessionary travel passholder* | Yes | 27.5 | 30.2 | |
| | No | 72.5 | 69.8 | |

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.

² 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.

- 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 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.

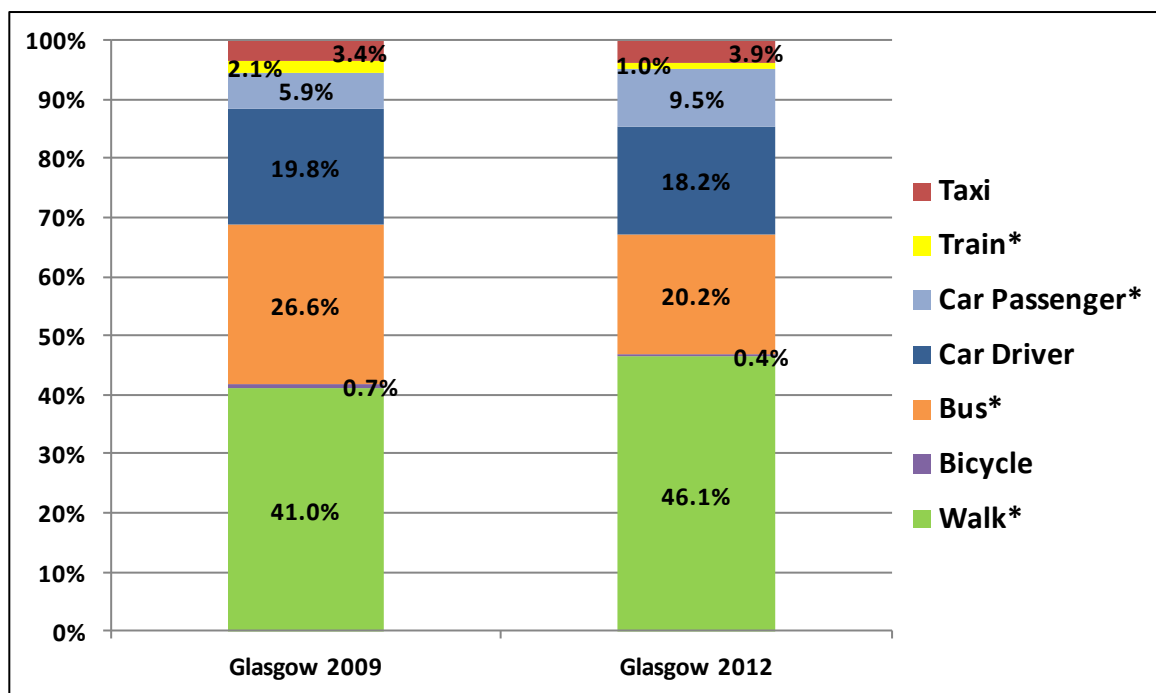
Modal split of journeys from the Travel Diaries

Observed changes

- 5.7 The travel diary element of the household survey recorded specific trip-making behaviour on a specific day³. Figure 5.1 shows the changes in modal choice of Glasgow East End residents 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 stage⁴.
- 5.8 The following modes increased their mode share in 2012 in comparison to the 2009 baseline:
- Walking.
 - Car passenger.
 - Taxi.
 - Other mode.
- 5.9 Decreases in modal share ranging from 0.1 to 6.4 percentage points occurred in the proportions of journeys by bus, train, bicycle, motorbike and car driver.
- 5.10 Significant increases were found in the modal share of walking and car passenger journeys. Significant decreases were found in the proportions of journeys made by bus and train.

³ 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 purpose, age categories etc.

⁴ From this point on 'journey' refers to the mode used for the longest (distance) stage of a journey so that comparisons can be made between attributes of travel and travel choices.

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

Travel Diary samples of $N = 1,757$ trips, weighted for 2009 and $N = 1,882$ trips weighted for 2012. Differences between 2009 and 2012 proportions are significant at $p < 0.05$ for all modes marked with *

Comparison with Scottish Household Survey Data

- 5.11 A comparison between the modal choices of respondents from Glasgow East End 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 5.2⁵.
- 5.12 This comparison shows that the changes in the mode share for walking, bus use and car driving are quite different from the “background trends” as represented by the SHS data. There was a five percentage-point increase in walking trips recorded in Glasgow East End compared to an almost three percentage-point fall in the SHS comparison locations. Similarly, car driving reduced by 1.6 percentage points compared to an increase of almost three percent in the SHS data and car passenger use grew faster than the background trend. However, bus use showed a much steeper decline, as did train use.
- 5.13 There was no difference in cycling rates as both the SCSP data and the SHS data suggest a small reduction in these locations.

⁵Both 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 Glasgow East End and SHS data between 2008/2009 and 2011/2012

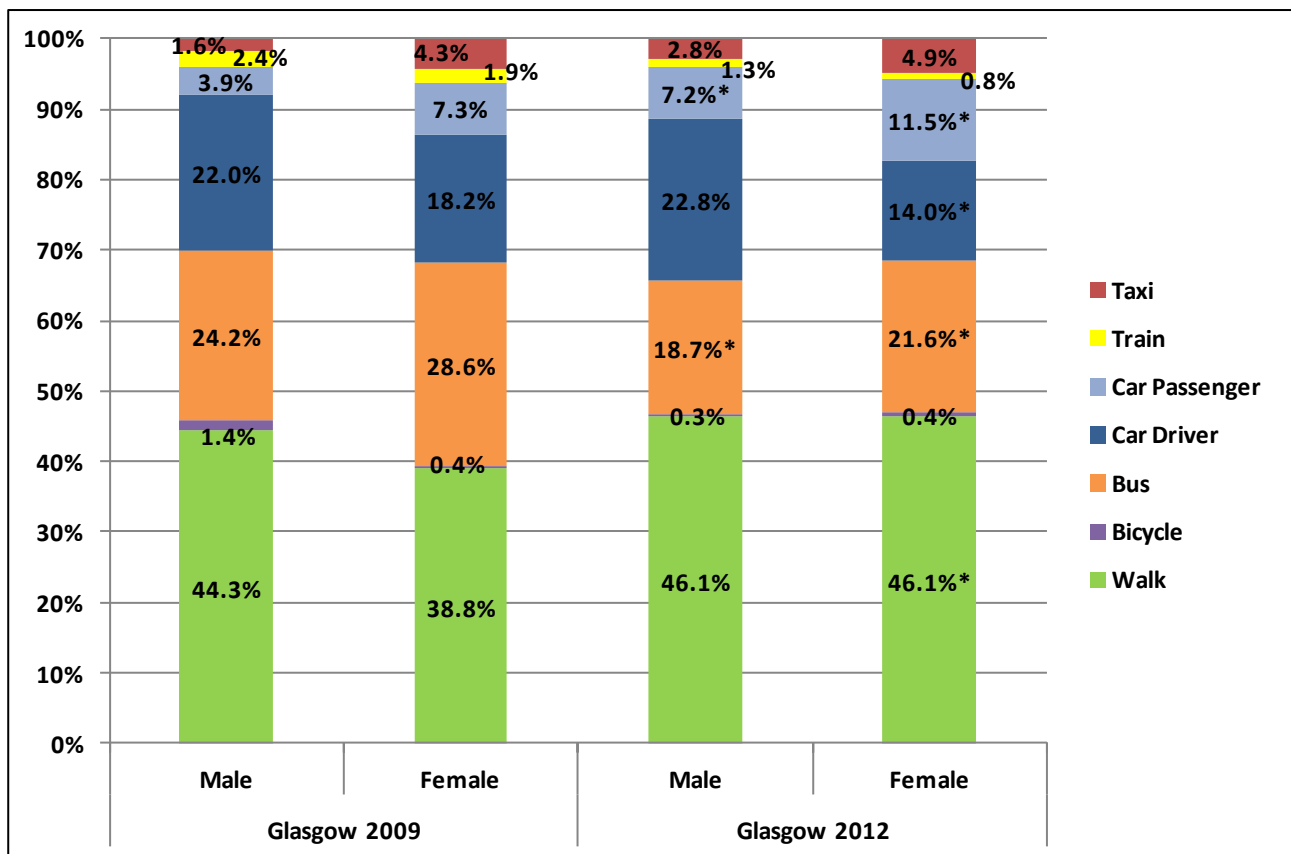
| Mode | % -point Change in Modal Share of Journeys | |
|---------------|--|----------------------------|
| | Glasgow East End 2009 - 2012 | SHS 2008 - 2011 |
| Walk | +5.1* | -2.8 |
| Bicycle | -0.4 | -0.4 |
| Bus | -6.4* | -0.4 |
| Car Driver | -1.6 | +2.7 |
| Car Passenger | +3.5* | +1.2 |
| Train | -1.1* | -0.1 |
| Motorbike | -0.1 | <i>included in 'other'</i> |
| Taxi | +0.5 | -0.5 |
| Other mode | +0 | -2.8 |

*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

- 5.14 Figure 5.2 details the changes in mode choice by Glasgow East End residents between 2009 and 2012 based on the share of all journeys made by main mode disaggregated by gender.
- 5.15 The proportion of respondents walking in 2012 for males and females respectively was 1.8 and 7.4 percentage points greater than observed in the 2009 baseline. Whilst the modal split of car driver journeys for women fell by 4.3 percentage points the proportion of journeys made by male drivers increased by 0.8 percentage points.
- 5.16 Significant decreases were found in the proportion of bus journeys for both sexes and in the proportion of car driver journeys made by female respondents.
- 5.17 Significant increases were identified in the modal split of walking journeys made by female respondents and in the proportion of car passenger journeys made by both sexes.

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



Travel Diary samples are 736 trips (male) and 988 (female), weighted for 2009 and between 900 (male) and 982 (female), weighted for 2012. Differences between 2009 and 2012 proportions are significant at $p < 0.05$ for all modes marked with *

Modal split of journeys by age

- 5.18 Table 5.3 compares the mode choice by Glasgow East End residents between 2009 and 2012 based on the share of all journeys made by main mode disaggregated by age.

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

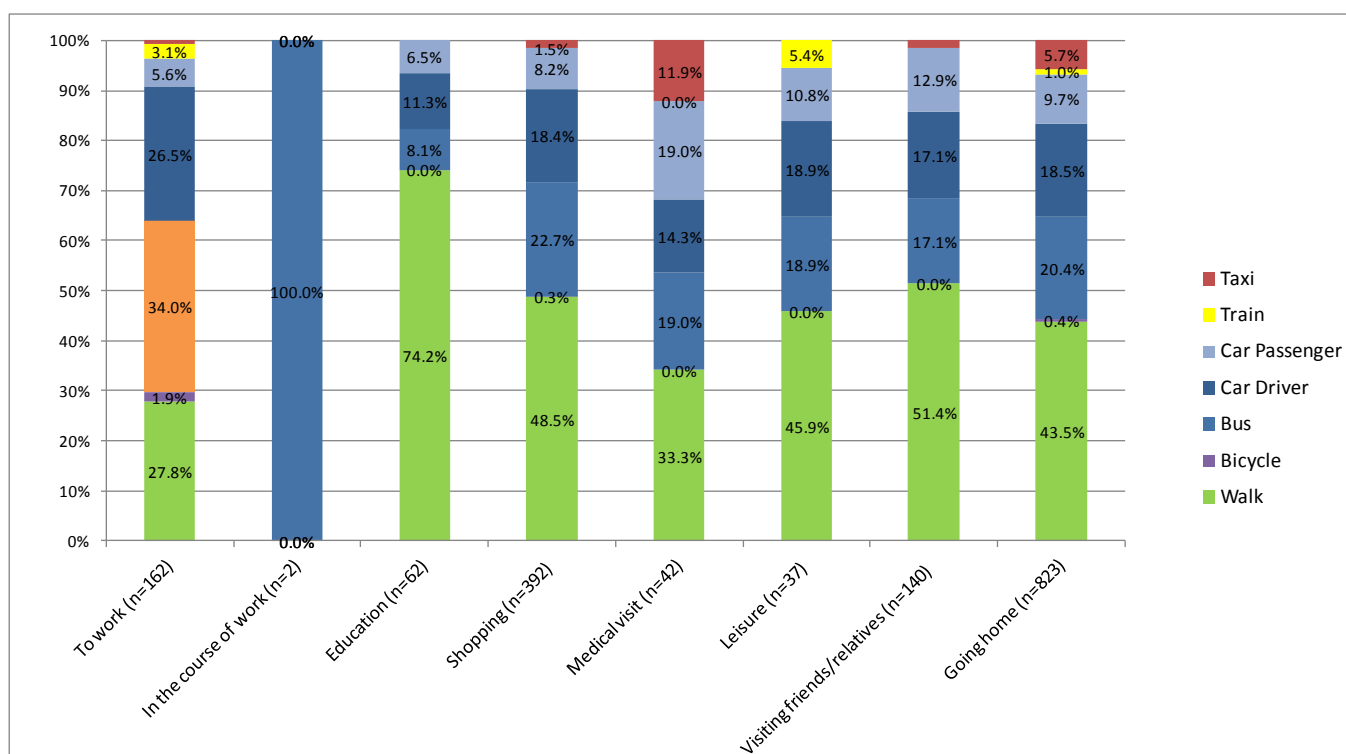
| | 2009 – 2012 percentage-point change | | | | | | |
|---------------|-------------------------------------|---------------|---------------|---------------|---------------|---------------|------------|
| | 18 - 24 years | 25 - 34 years | 35 - 44 years | 45 - 54 years | 55 - 64 years | 65 - 74 years | 75 or over |
| Walk | +1.3 | +7.7* | -2.9 | +9.5* | +2.1 | +9.0 | +12.1 |
| Bicycle | -0.4 | -1.8 | +0.6 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bus | -5.7 | -8.1* | -5.5 | -6.7 | -4.8 | -4.8 | +2.0 |
| Car Driver | +6.2* | -3.9 | +2.5 | -6.3* | -7.2* | -5.2 | -10.4 |
| Car Passenger | +7.4 | +4.6 | +5.8* | -0.3 | +6.1* | -0.7 | -6.0 |
| Train | -7.1* | +0.7 | -0.8 | +0.4 | 0.0 | 0.0 | 0.0 |
| Taxi | -1.7 | +0.4 | +0.2 | +3.0 | +1.9 | +1.8* | +2.8 |

*Travel Diary samples range between 104 (75 or more years) and 373 (25-34 years) weighted for 2009 and between 67 (75 or more years) and 470 (25-34 years) weighted for 2012. Differences between 2009 and 2012 proportions are significant at $p < 0.05$ for all marked with *.*

- 5.19 Increases were observed in the modal share of walking journeys across all age groups with the exception of those respondents aged 35-44 years, where a decrease of 2.9 percentage points occurred.
- 5.20 The proportion of journeys made by car drivers decreased in all age groups with the exception of those aged 18-24 years and 35-44 years. Decreases were also observed in the modal share of bus journeys across all age groups with the exception of those respondents aged 75 years and over, where the proportion increased by 2.0 percentage points.
- 5.21 Significant increases were identified in:
- walking by respondents aged 25-34 years and 45-54 years
 - car passenger trips in respondents aged 35-44 years and 55-64 years
 - car driving among the youngest age category.
- 5.22 Significant reductions occurred in:
- bus journeys made by respondents aged 25-34
 - car journeys driven in the 45-54 and 55-64 age groups.

Modal split of journeys by journey purpose

- 5.23 Figure 5.3 compares the mode choice by Glasgow East End residents between 2009 and 2012 based on the share of all journeys made by main mode disaggregated by journey purpose.

Figure 5.3: Comparison of mode choice (by %of journeys made) by purpose

Travel Diary samples range between 2 (in the course of work) and 823 (going home) weighted 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 visit | Leisure | Visiting friends/r relatives | Going home |
| Walk | +9.4* | -10.8 | +14.2 | -1.3 | +9.8 | -1.6 | +20.6* | +1.3 |
| Bicycle | -0.7 | 0.0 | 0.0 | -0.2 | 0.0 | -0.7 | 0.0 | -0.3 |
| Bus | +0.8 | +81.1 | -6.5 | -2.0 | -1.5 | -4.2 | -12.6* | -8.2* |
| Car Driver | -11.7* | -64.9 | -5.1 | +2.3 | -9.2 | +5.6 | -0.9 | +2.6 |
| Car Passenger | +2.5 | -5.4 | +6.5 | +2.4 | +7.3 | +2.4 | +1.2 | +4.4* |
| Train | -1.0 | 0.0 | -9.1 | -0.2 | 0.0 | +3.3 | -1.1 | -1.9 |
| Taxi | +0.1 | 0.0 | 0.0 | -1.0 | -8.7 | -4.2 | -7.1 | +1.8 |

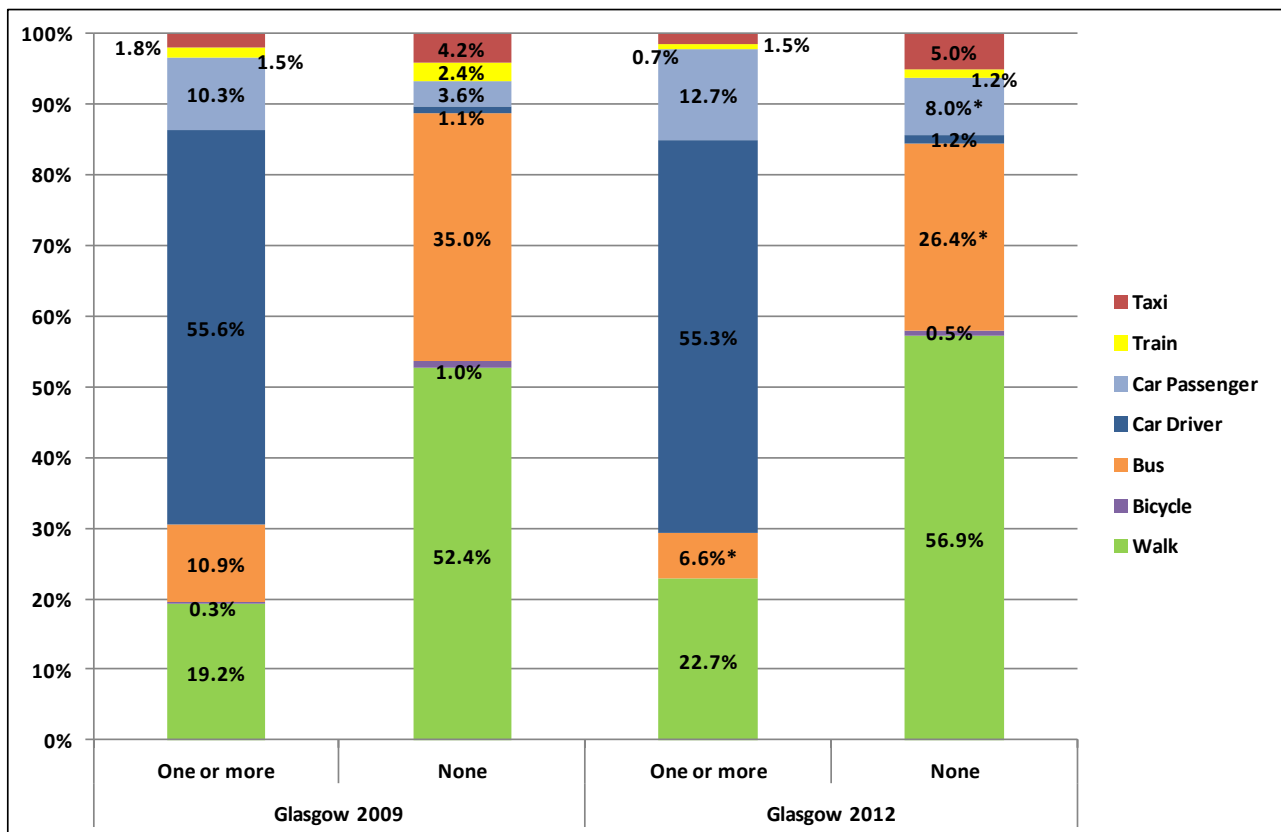
Travel Diary samples range between 34 trips (medical visit) and 635 (going home) weighted for 2009 and between 2 (in the course of work) and 823 (going home) weighted for 2012. Differences between 2009 and 2012 proportions are significant at $p < 0.05$ for all marked with *.

- 5.24 The greatest increases in the proportion of walking journeys was 20.6 percentage points for visits to friends and family and 14.2 percentage points for education.
- 5.25 Significant increases included walking journeys to work, and visits to friends and relatives and car passenger journeys returning home.

- 5.26 The decrease of 11.7 percentage points in the proportion of car driver journeys to work was also found to be significant along with the decreases observed in bus journeys to visit friends/relatives and returning home.

Modal split of journeys by household car ownership

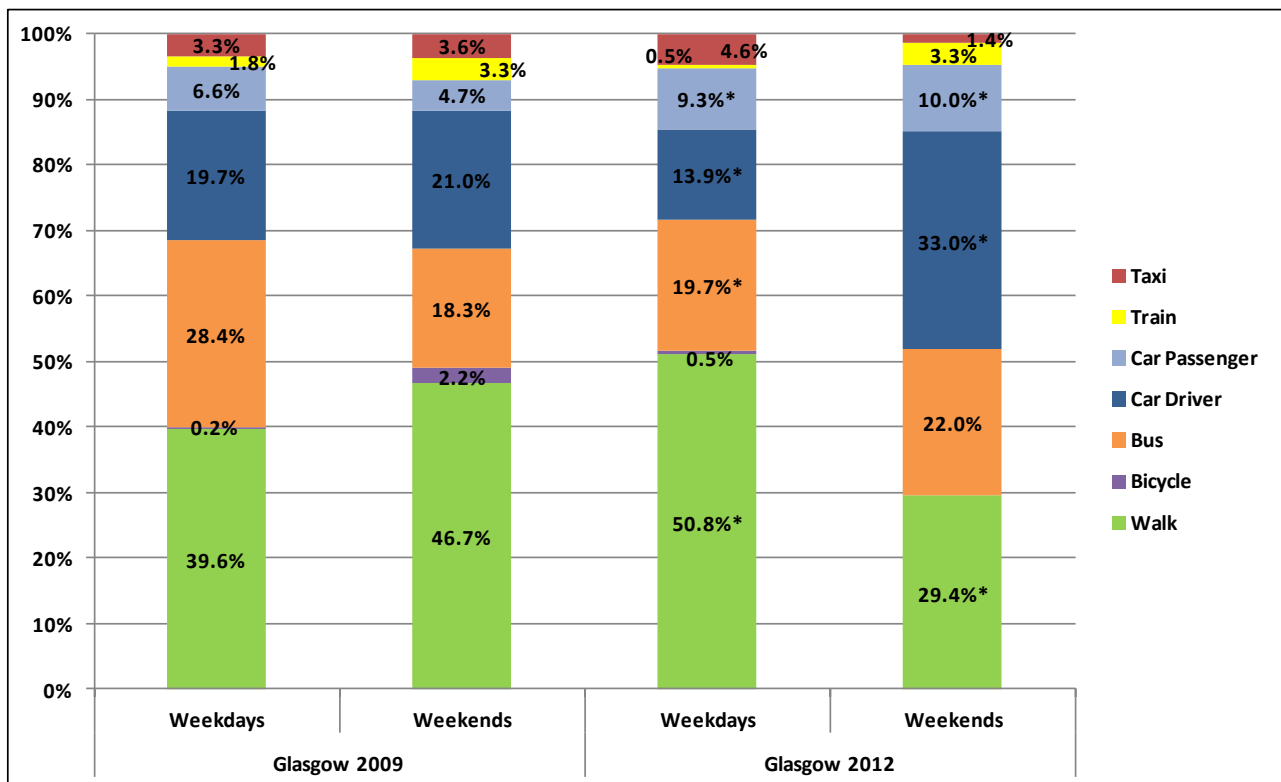
- 5.27 Figure 5.5 illustrates the modal choice of Glasgow East End residents between the 2009 baseline and 2012 post-implementation based on the share of all journeys made by main mode and disaggregated by whether or not the respondent lives in a household with a car.
- 5.28 The modal split of walking journeys increased by 3.4 and 4.4 percentage-points for respondents living in car-owning and non car owning households respectively. Similarly there was an increase in the proportion of car passenger journeys made by respondents in both these groups.
- 5.29 In contrast there was a decrease in the modal splits of public transport (bus and train) and bicycle in both respondents living in car owning and non car owning households.
- 5.30 The decreases observed in the modal splits of bus journeys for respondents with and without a car were significant. The increase of 4.4 percentage points in the proportion of car passenger journeys made by respondents in non car owning households was also found to be significant.

Figure 5.5: Comparison of mode choice (by % of journeys made) by household car ownership

Travel Diary samples are 603 trips (one or more cars) and 1,152 (no car) weighted for 2009 and 591 trips (one or more cars) and 1,291 (no car) weighted for 2012. Differences between 2009 and 2012 proportions are significant at $p < 0.05$ for all marked with *.

Modal split of journeys by weekday/weekend

- 5.31 Figure 5.6 above compares the modal choice of Glasgow East End residents in 2009 and 2012 based on the share of all journeys made by main mode for weekdays and weekends.

Figure 5.6: Comparison of mode choice (by number of journeys made) by weekday/weekend

*Travel Diary samples are 1,238 trips (Weekday) and 448 (Weekend) weighted for 2009 and 1,464 (Weekday) and 418 (Weekend) weighted for 2012. Differences between 2009 and 2012 proportions are significant at $p < 0.05$ for all modes marked with **

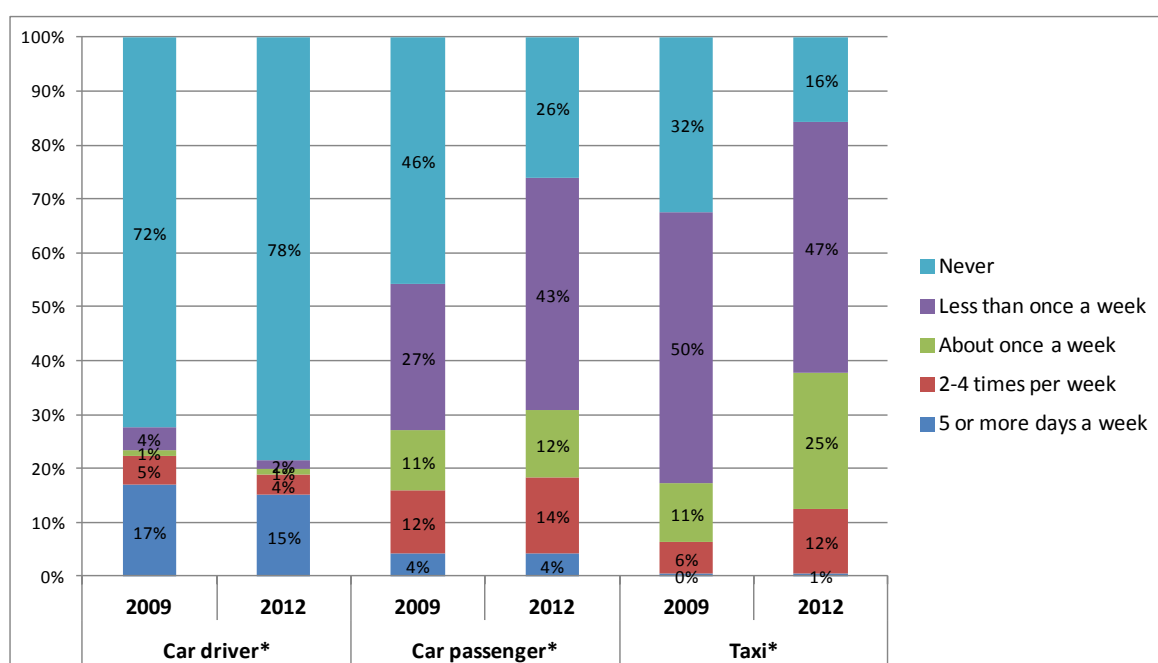
- 5.32 An increase in the proportion of respondents travelling as a car passenger occurred for journeys made both during the week and at the weekend. The modal split for walking rose by 11.2 percentage points for weekday journeys but fell for journeys made at the weekend.
- 5.33 A significant increase was found for weekday walking trips. Conversely a significant decrease in weekend walking trips was identified. The reverse was apparent for car driver journeys. There was a significant decrease in the proportion of weekday car driver journeys and a significant increase in the proportion of weekend journeys.
- 5.34 The weekday and weekend increases in the modal split of car passenger journeys were both found to be significant. In addition, a significant decrease was observed in the modal split for bus journeys.

Self-reported frequency of use of each mode

- 5.35 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.

- 5.36 Fig 5.7 shows that frequency of use of the car appears to have dropped slightly. The number of people who say they drive on five or more days per week has fallen from 17% to 15% (12% or a 2 percentage-point drop). Also, the proportion of people who say they never drive has increased from 72% to 78% (8% or a 6 percentage point increase). In contrast, the number of people who say they never use the car as a passenger has fallen substantially from 46% to 26% (43% or a 20 percentage point drop) with much more occasional use as a passenger than in the baseline. The change in car driving is statistically significant.
- 5.37 Changes in the use of the car as a passenger have also changed significantly, with fewer people saying they never travel as a passenger and much more occasional use.

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



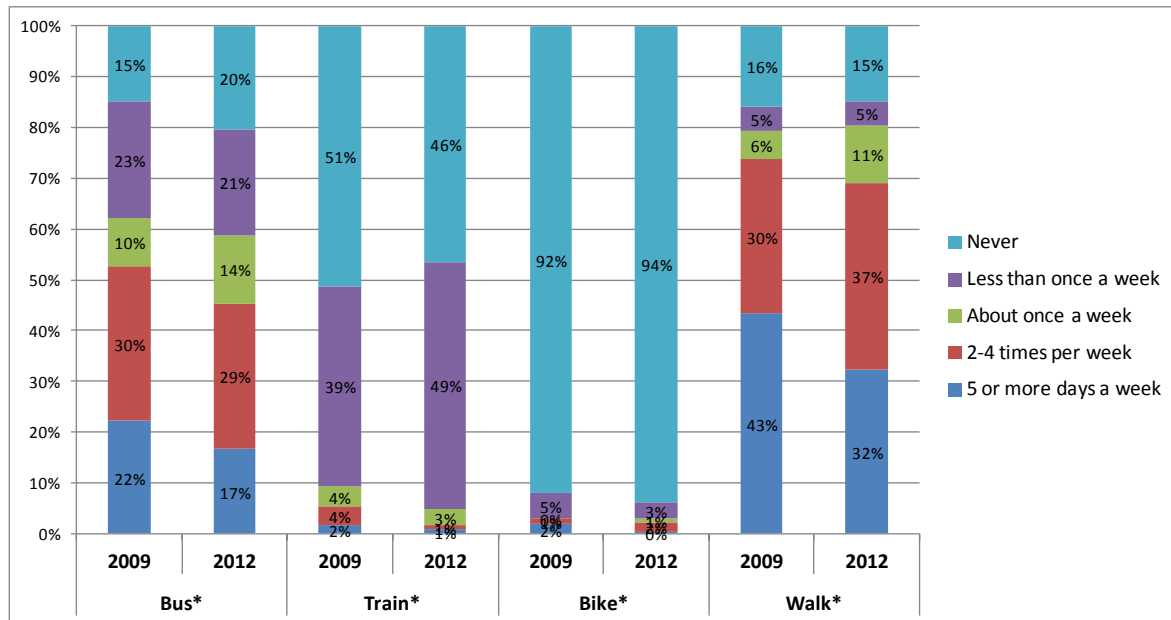
Household survey samples of $N = 1365$ respondents, weighted for 2009 and $N = 1044$ weighted for 2012.

Differences between 2009 and 2012 proportions are significant at $p < 0.05$ for all modes marked with *.

- 5.38 Figure 5.8 shows that there has been a statistically significant reduction in the use of all other modes too. The number of people using the bus in all frequency categories has dropped, except for those saying they never use it which has increased. Use of the bus most days has fallen from 22% to 17%. Frequent use of the train has also fallen but there has been a 16%-point reduction in the proportion of people who say they never use the train.
- 5.39 There has been a slight (2%-point) increase in the number of people who say they never cycle, and small reductions in the proportions of who say they cycle regularly or occasionally.

- 5.40 There is the same proportion of people doing at least some walking as in 2009, but there has been an 11 percentage point drop in those walking more than 5 days a week.
- 5.41 The 2012 survey also asked people to register their frequency of use of dial-a-ride services. In Glasgow East End, 95.5% said they never used this service.

Figure 5.8-Self reported use of non-car travel modes in 2009 and 2012

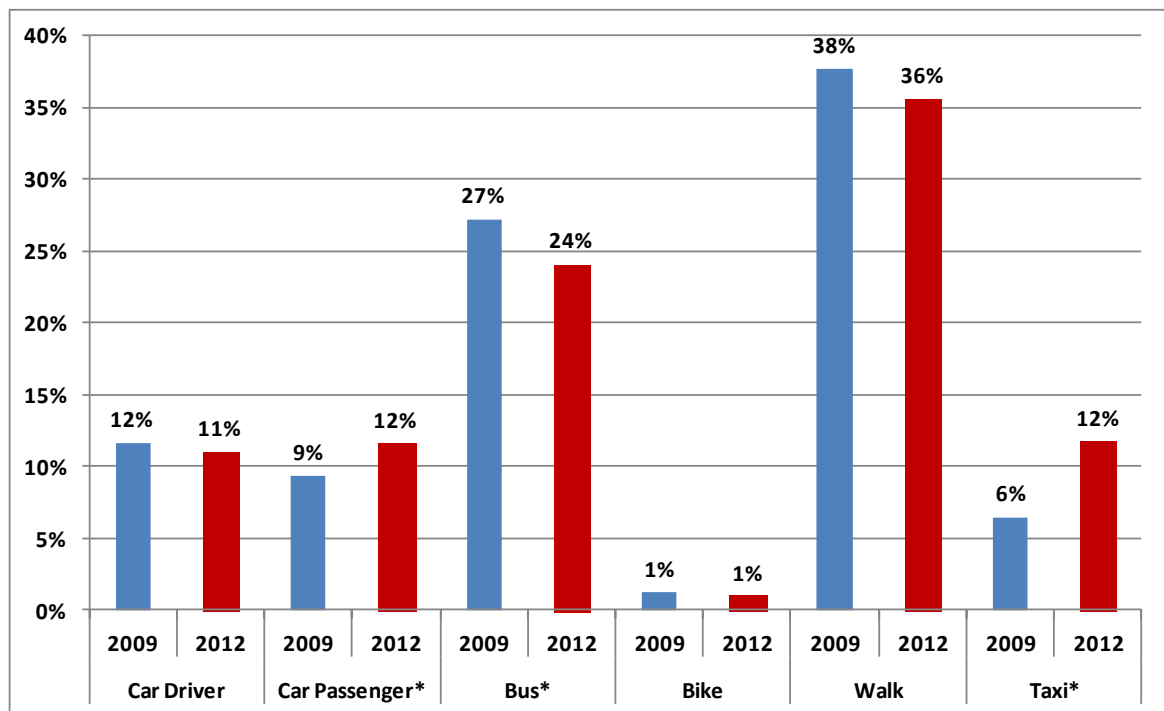


Household survey samples of $N = 1365$, weighted for 2009 and $N = 1044$ weighted for 2012. Differences between 2009 and 2012 proportions are significant at $p < 0.05$ for all modes marked with *.

Multi-modal travel behaviour

- 5.42 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 options⁶. Figure 5.9 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.
- 5.43 The analysis suggests that car driving has reduced only slightly as a proportion of total trips, car passenger and taxi trips have increased, and the use of other modes has reduced. This analysis also shows the continuing relative importance of walking and the bus in Glasgow East End.

⁶They 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.

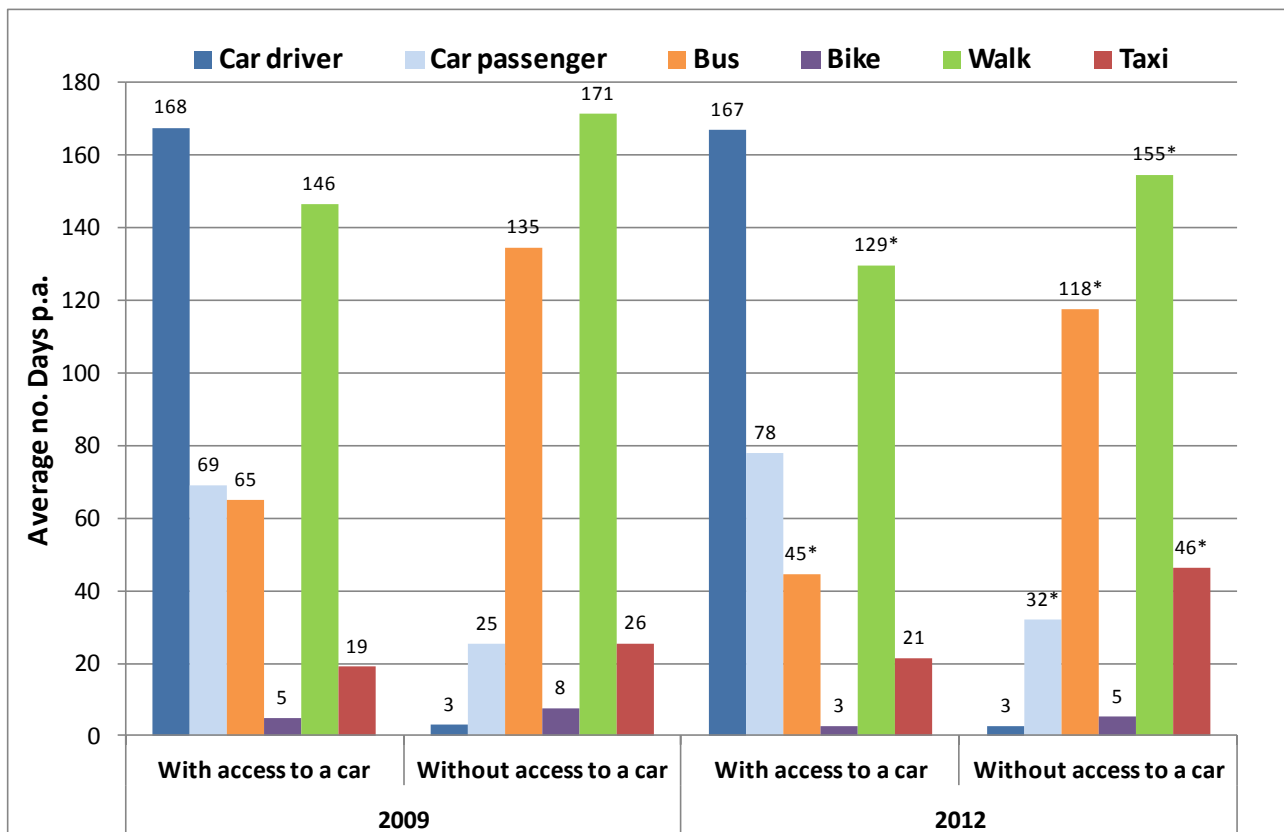
Figure 5.9-Average proportion of trips undertaken by each mode in 2009 and 2012

Household survey samples of $N = 1365$, weighted for 2009 and $N = 1044$ weighted for 2012. Differences between 2009 and 2012 proportions are significant at $p < 0.05$ for all modes marked with *.

Demographic differences in behaviour

- 5.44 Figure 5.10 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. When comparing across years, it is evident that the changes in mode use have been quite similar for both types of household except the fact that the increased use of taxis is much greater in non-car owning households.

Figure 5.10: 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 $N = 1365$, weighted for 2009 and $N = 1044$ for 2012. Differences between 2009 and 2012 for each type of household are significant at $p < 0.05$ for all modes marked with *.

5.45 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 Ave. no. days p.a. | | | | | 2012 Ave. no. days p.a. | | | | | Percentage Difference between 2009 & 2012 | | | | |
|-----------------|----------------------------|-----|-------|------|------|----------------------------|-----|-------|------|------|--|------|-------|------|-------|
| | Car driver | Bus | Cycle | Walk | Taxi | Car driver | Bus | Cycle | Walk | Taxi | Car driver | Bus | Cycle | Walk | Taxi |
| Male | 55 | 104 | 6 | 167 | 20 | 44 | 93 | 5 | 137 | 35 | -21% | -10% | -10% | -18% | 78% |
| Female | 43 | 119 | 5 | 149 | 25 | 30 | 103 | 2 | 135 | 47 | -31% | -13% | -56% | -9% | 88% |
| | | | | | | | | | | | | | | | |
| With children | 78 | 122 | 5 | 181 | 31 | 70 | 94 | 4 | 183 | 43 | -11% | -23% | -17% | 1% | 36% |
| Without | 41 | 109 | 5 | 150 | 21 | 29 | 100 | 3 | 127 | 42 | -29% | -9% | -36% | -15% | 101 % |
| | | | | | | | | | | | | | | | |
| In work | 117 | 113 | 12 | 179 | 24 | 100 | 108 | 7 | 166 | 38 | -14% | -4% | -40% | -7% | 55% |
| Not working | 25 | 111 | 2 | 149 | 23 | 17 | 96 | 2 | 128 | 43 | -32% | -13% | 18% | -14% | 92% |
| | | | | | | | | | | | | | | | |
| With disability | 15 | 87 | 4 | 106 | 28 | 17 | 79 | 1 | 82 | 47 | 20% | -10% | -77% | -23% | 67% |
| Without | 63 | 122 | 6 | 176 | 21 | 49 | 111 | 5 | 172 | 39 | -21% | -9% | -8% | -2% | 87% |
| | | | | | | | | | | | | | | | |
| 16-34 years | 56 | 124 | 15 | 184 | 24 | 67 | 96 | 6 | 184 | 40 | 19% | -22% | -58% | 0% | 68% |
| 35-64 years | 65 | 114 | 3 | 168 | 24 | 44 | 103 | 5 | 142 | 37 | -33% | -10% | 41% | -16% | 55% |
| 65+ years | 19 | 101 | 1 | 119 | 21 | 11 | 96 | 1 | 104 | 48 | -45% | -5% | 8% | -13% | 127 % |

Differences between demographic characteristics are significant at $p < 0.05$ for all modes unless the box is shaded dark grey.

- 5.46 Men report more car driving, and women more taxi use in both survey years. Over the study period, men reduced their walking much more than women. Women reduced their car driving and cycle use much more than men, so that in 2012 women appear to cycle much less than men.
- 5.47 Those with children drive more than those without but they also walk more and, unlike those with children, maintained their level of walking over the period. In the post intervention survey, those with children reduced their level of bus use more than those without and reduced their use of cycling a little less. Those without children were the only ones to increase their cycle rates.
- 5.48 Those in employment are much more likely to use all modes more frequently other than taxis. In the post-intervention survey, those out of work had reduced their car use the most and were the only ones to have increased cycling. They also increased taxi use more. Employed people reduced their use of the bus and walking, but not as much as those out of work.

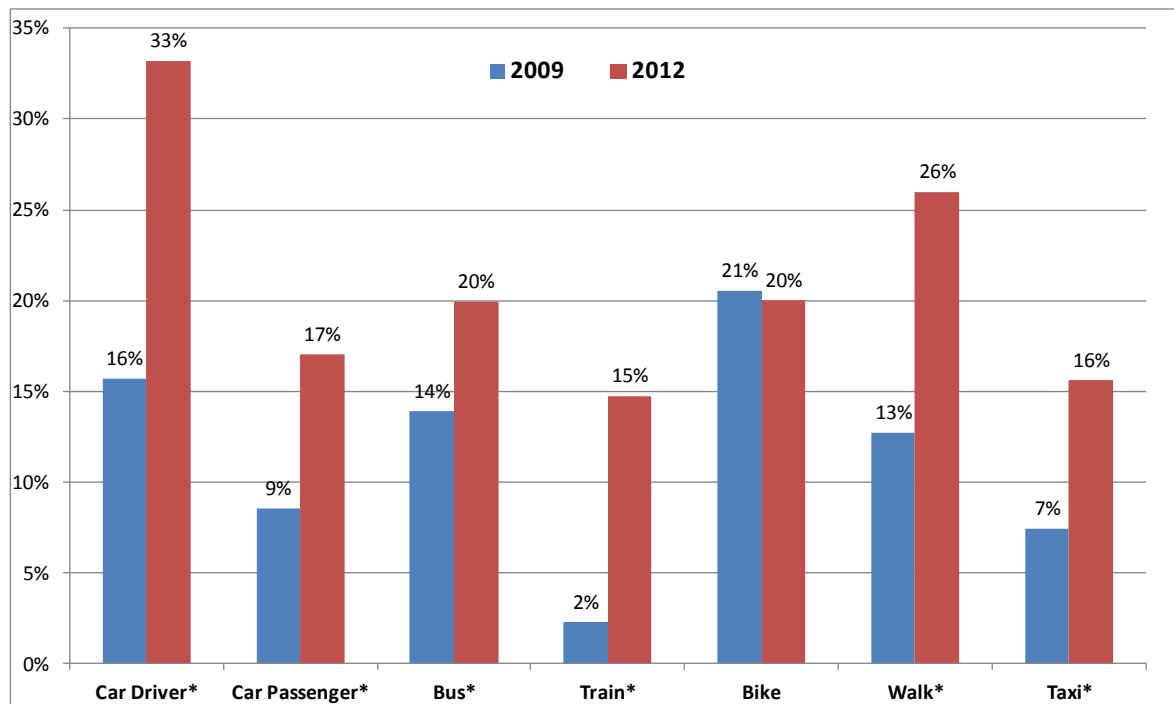
- 5.49 Those with a long standing illness or disability (21% in 2009, 31% in 2012) are much less reliant on the car in both periods but increased their car driving over the period in contrast to those with a disability. They also reduced their use of the bus, cycling and walking. Those without a disability were the ones to increase their use of taxis.
- 5.50 Younger age groups are more likely to walk and cycle in both years. The youngest group was the only one to maintain its level of walking but was also the only group to increase their use of the car. The oldest age group has seen the greatest reduction in car driver trips and the largest increase in taxi use. Cycling increased the most in the middle aged group.

Self reported change in mode use over the past 12 months

- 5.51 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 get a sense of change in travel behaviour, 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.
- 5.52 Figure 5.11 shows the degree to which respondents⁷ reported that they had changed each mode of transport in the past 12 months. The chart shows the proportion of respondents who reported that their use of each mode had changed in either 2009 or 2012.
- 5.53 Overall there was more change in the use of all modes except cycling in the twelve months prior to 2012 than in 2009. The most change was reported in car driving. When looked at in conjunction with Figure 5.12, we can see that this change in car driving was made up predominantly of people reporting that they had increased their car use with over three times as many people saying they had increased driving than had reduced it.
- 5.54 Similarly, walking witnesses a large change in 2012 but there are slightly more people who said they have reduced their walking than who had increased it. Train use also saw a much greater change in 2012 than in 2009 and the self-reported data suggests this was due to 13% of train users saying they had reduced travel by this mode.

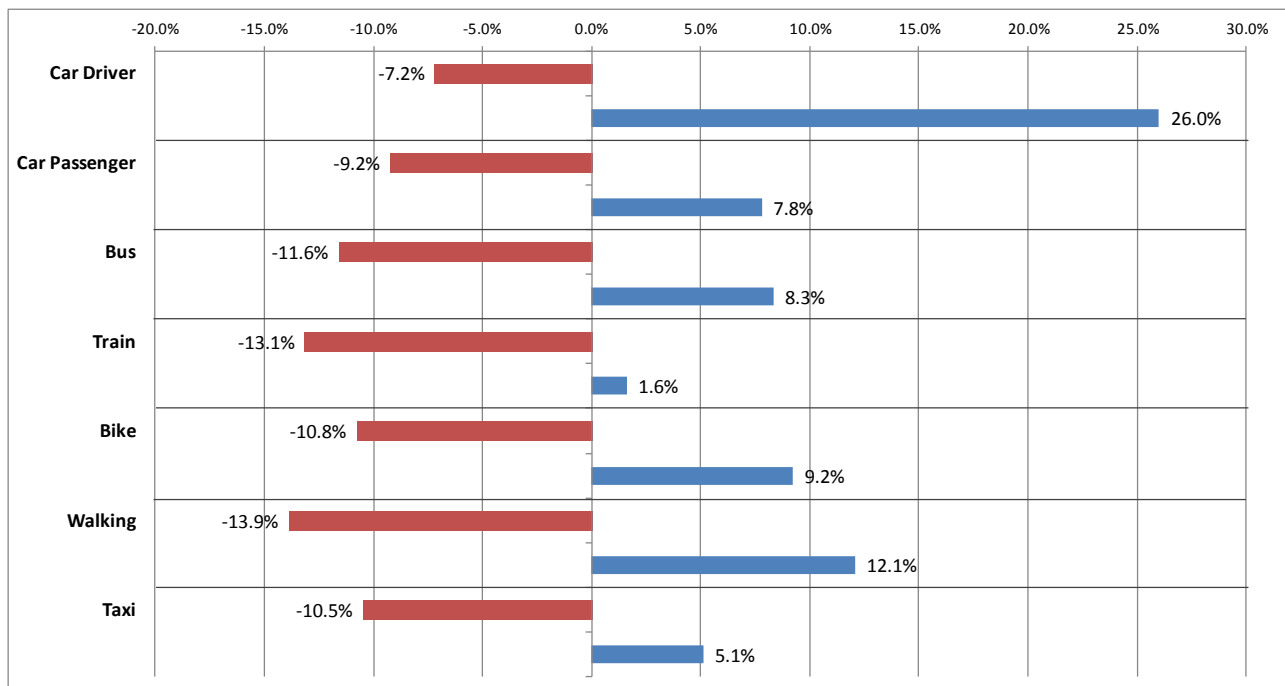
⁷Only those who had reported that they had used each mode at least once in the last 12 months.

Figure 5.11 – 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 109 & 1117 respondents weighted for 2009 and 65 & 878 weighted for 2012. Differences between 2009 and 2012 are significant at $p < 0.05$ for all modes marked with *.

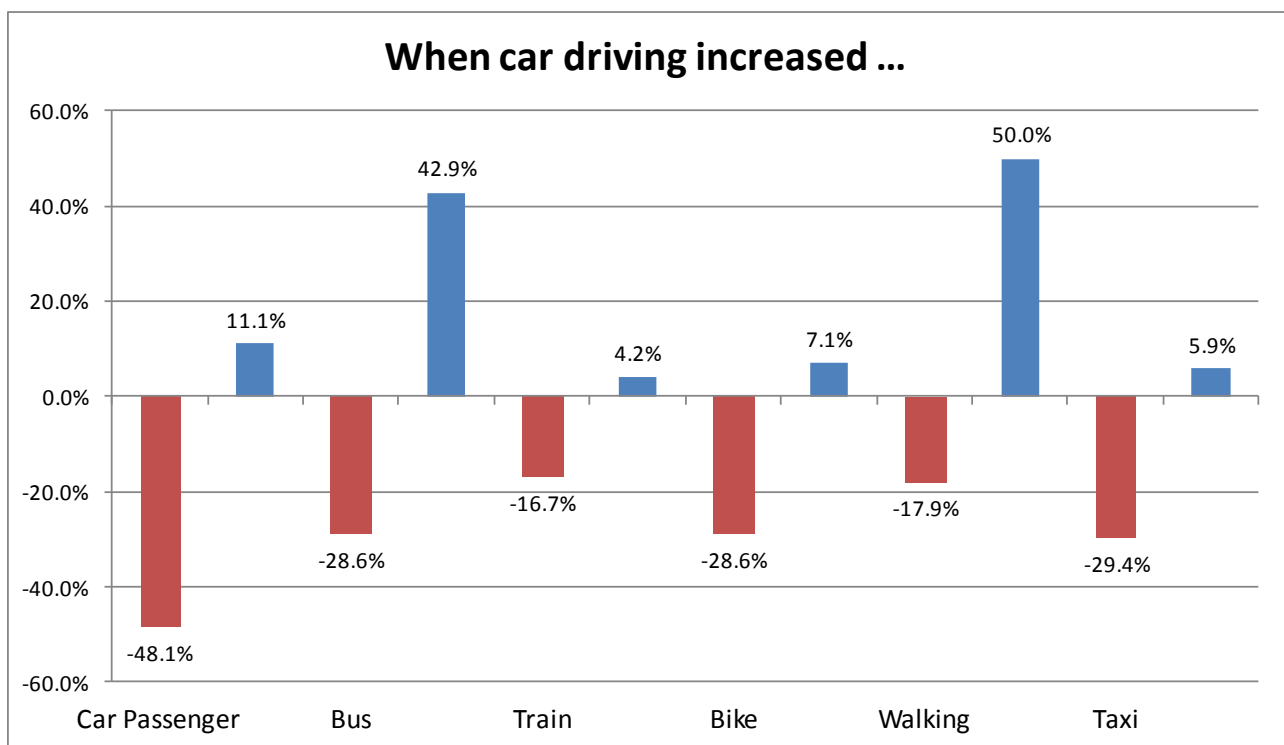
Figure 5.12– Self reported reduction or increase in each mode in the 12 months prior to 2012



Household survey samples of N = between 65 & 878 respondents (weighted, 2012).

5.55 The survey allows us to examine the relationship between the different 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 mode use⁸. Figure 5.13 shows that when car driving is reported to increase (26.0% of respondents), people tend to report a corresponding net reduction in trips as a car passenger, by bike, train and by taxi. However, bus use and walking are increased by many people at the same time as increasing their car use. When car driving is reported to reduce (7.2% of respondents), there was a notable increase in almost all modes except travelling by train and by taxi as shown in Figure 5.14. Given that the focus group emphasise the increasing sensitivity to the cost of travel both train and taxi would be relatively expensive modes accounting for this fall.

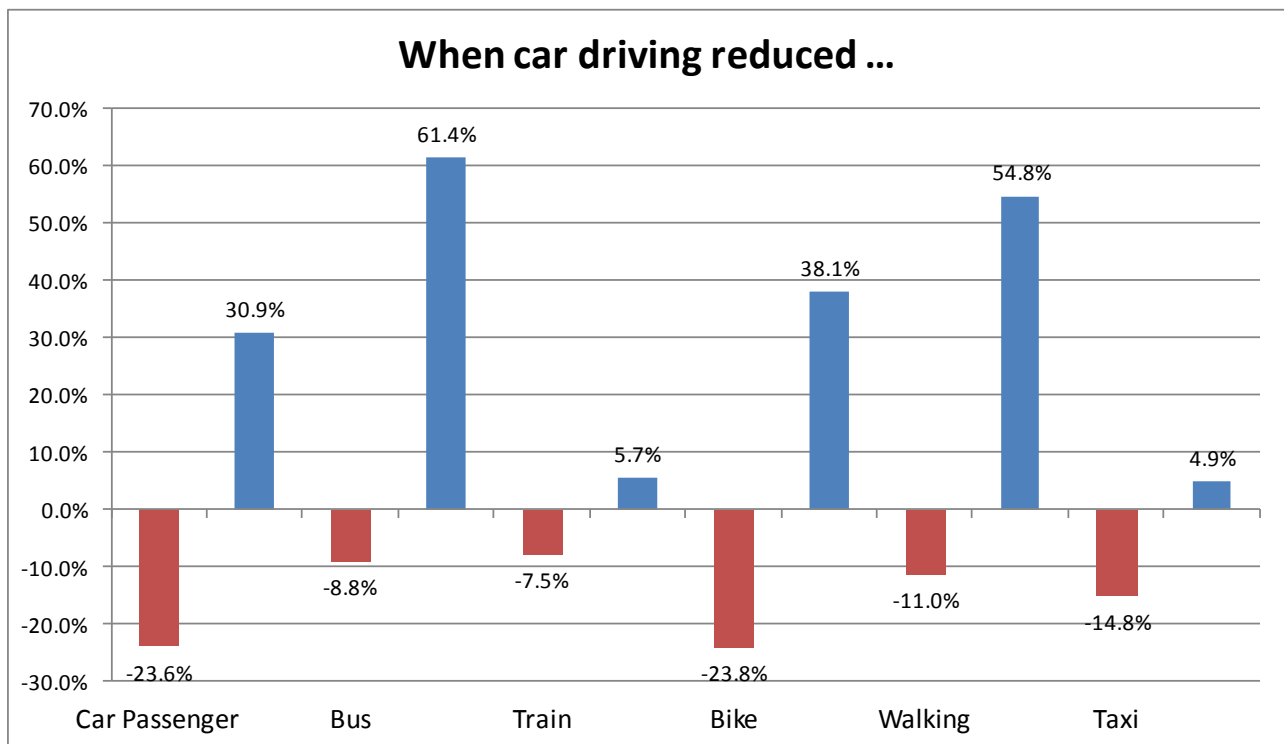
Figure 5.13– Self-reported changes in other modes when car driving increased



Household survey samples of N = between 65 & 878 respondents (2012).

⁸Bearing 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.

Figure 5.14– Self-reported changes in other modes when car driving reduced



Household survey samples of N = between 65 & 878 respondents (weighted, 2012).

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

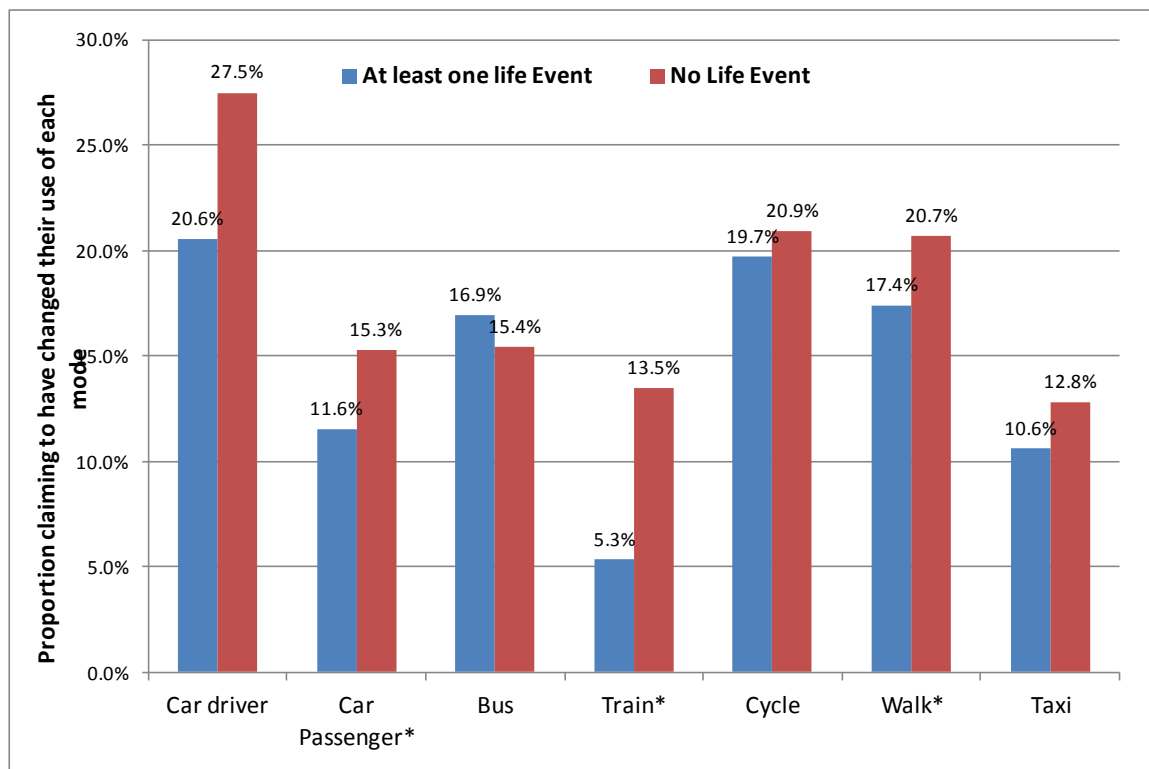
- 5.56 Change in travel behaviour may occur when people undergo an event in their life such as changing job or moving house⁹. Experience in the previous 12 months of these life events, or 'moments of change' were recorded in 2012 (though not in 2009). Figure 5.15 shows that life events do not lead to a greater change in travel behaviour in Glasgow East End, with the possible exception of bus use¹⁰.
- 5.57 This is unusual across the SCSP pilot areas as in general there is a strong correlation between these events and changes to mode use. In general, the figures for Glasgow East End show relatively high stability in travel behaviour (i.e. less tendency for people to say they have changed mode in the past 12 months), although this is not the case for car

⁹ 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.

¹⁰ These data do not include people who 'never' used a mode in the past 12 months. But as this should only pick up those people who stopped using the mode before the past year (otherwise they would have had at least some use of it in the past 12 months), this means that the life events in the past year could not have been the cause of never using the mode.

travel in 2012 where it showed the highest self reported change of any SCSP area. The focus group participants noted that local people looked for training and support when making life changes like getting a job or moving house, so perhaps the reason Glasgow East End is different from the other SCSP pilot areas is that stability is perceived to be required for change rather than instability driving change.

Figure 5.15– The proportion of people claiming to change use of each mode according to the experience of life events in the previous 12 months (2012)

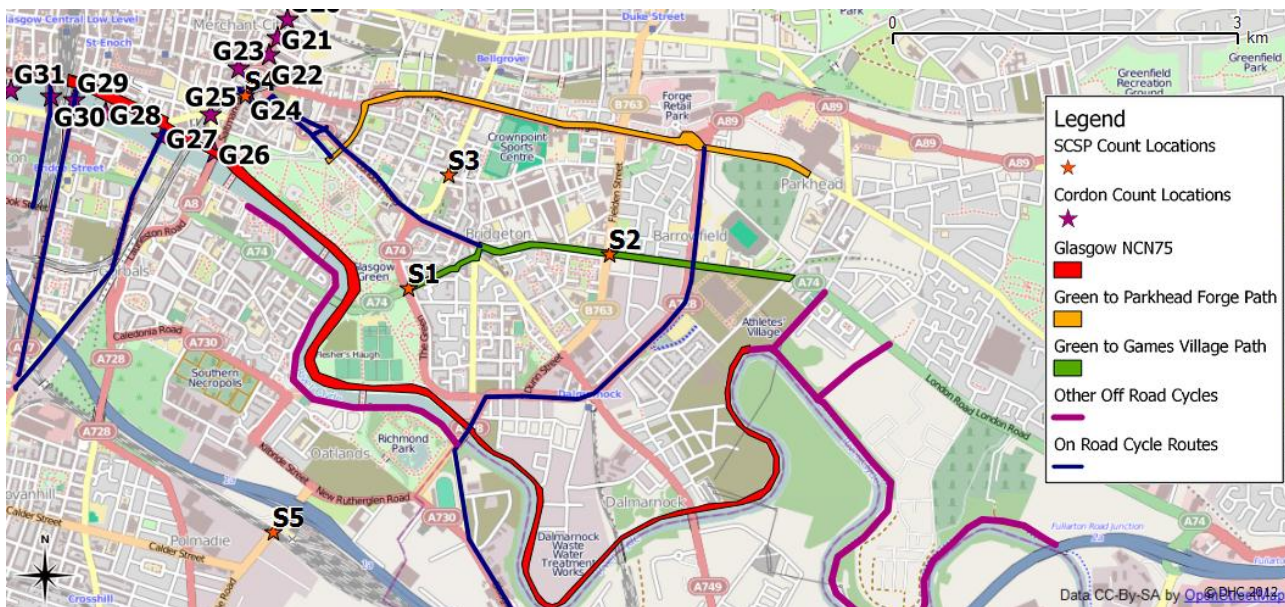


Household survey samples of N = between 65 & 878 respondents-(weighted, for 2012). Differences between life event/ no life event significant at $p < 0.05$ for all modes marked with *.

Pedestrian and Cycle Count Data

- 5.58 Cordon counts for entering the central area of Glasgow have been undertaken in recent years. Figure 5.16 shows the count locations along the eastern boundary. The flows between the East End and the city centre were taken from the count locations G14 to G26, which border the east side of the city centre.
- 5.59 Between 2009 and 2011 the total number of pedestrians fell 5% in the targeted area, while numbers of cyclists increased 10.4% (Table 5.6). The changes emphasise the trend across the whole central area cordon, where the number of cyclists travelling into and out from the centre, increased 7.1%. The number of pedestrians crossing the cordon into Glasgow City Centre fell by 2.6% but the equivalent decrease for walking from the East End into the City was greater at 5.3%.

Figure 5.16– Pedestrian and Cycle Count Locations

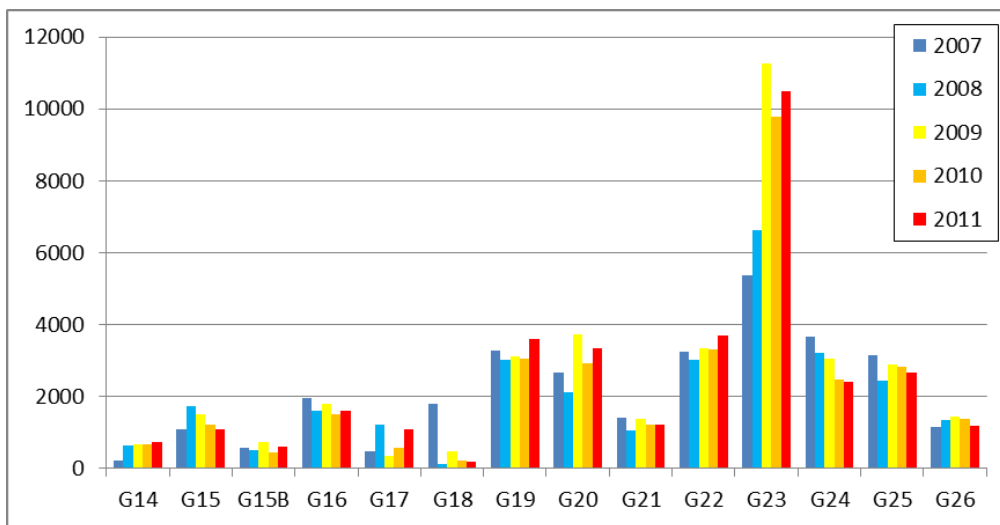


- 5.60 Counts were undertaken over the course of 2 days in May of each year between 2007 and 2012 and a 2 day mean established from the data.
- 5.61 Figure 5.17 summarises the changes in pedestrian numbers for counts G14 to G26. Counts are 2-way May weekday flows for 2007, 2008, 2009 and 2011, between 6.00am and 8.00pm. The 2010 counts were undertaken in September¹¹.
- 5.62 These counts all took place prior to the bulk of the investment being made so are a guide to background trends and seasonality of walking and cycling activity rather than any specific indication of the impacts of SCSP. Glasgow East End on the Move, started implementation in April 2010 with the marketing campaign.

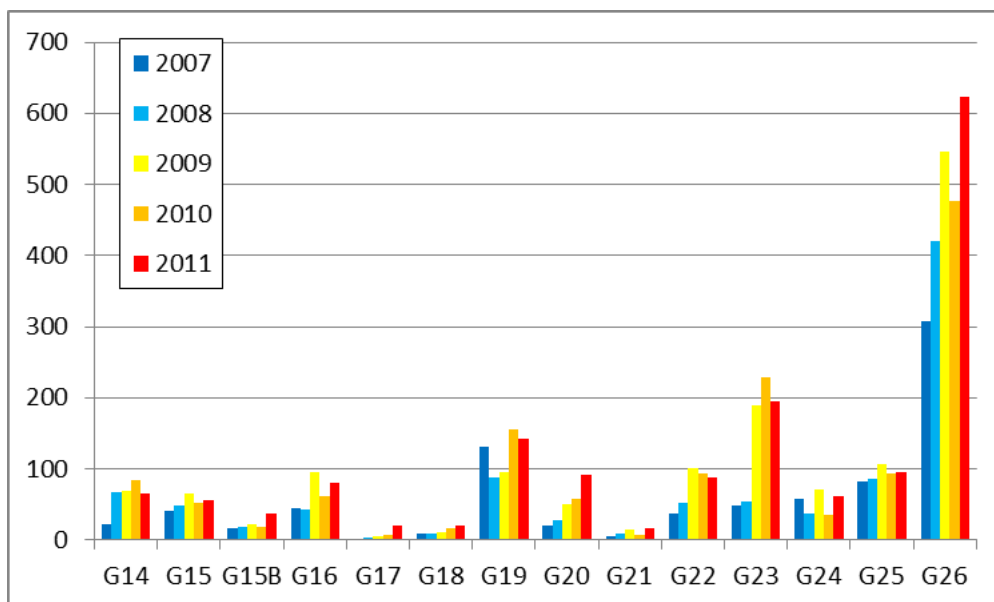
Table 5.6- Daily average numbers of pedestrian and cyclists between 2007 and 2011.

| | | 2007 | 2009 | 2011 | Change 2007 - 2011 in % | Change 2009 - 2011 in % |
|-----------------------------------|-------------|-------|-------|-------|----------------------------|----------------------------|
| The whole City Centre Cordon | Pedestrians | 77144 | 86854 | 84561 | 9.61 | -2.64 |
| | Cyclists | 3601 | 5214 | 5585 | 55.10 | 7.12 |
| Counters G14 - G26 (East Glasgow) | Pedestrians | 30042 | 35754 | 33956 | 13.03 | -5.03 |
| | Cyclists | 826 | 1443 | 1593 | 92.86 | 10.40 |

¹¹Spreadsheets provided by Glasgow City Council in May 2011. The City Council note that they observe very little seasonal variation in pedestrian numbers.

Figure 5.17– 2 Way Weekday Pedestrian Count Data 2007 to 2010

- 5.63 Figure 5.18 shows the total cycle flows across the cordons averaged over the 2 days on which counts were taken.
- 5.64 The overall rise in cycling has been marked. Almost every location has recorded an overall increase in cyclists between 2007 and 2011 with 1593 cyclists recorded crossing the cordon into Glasgow City Centre in 2011 compared to 826 in 2007.
- 5.65 Growth continues to be concentrated on core routes. The combination of investment in infrastructure and marketing as part of SCSP could be reinforcing these trends.

Figure 5.18– 2 Way Weekday Cycle Count Data 2007 to 2011

- 5.66 Before and after counts were also undertaken at 3 locations along new cycle routes. At each of these locations increases have been recorded in both pedestrian and cycling usage. Figures 5.19 and 5.20 provide the comparison data.

Figure 5.19- 2 Way Weekday Pedestrian Data for 2010 and 2012

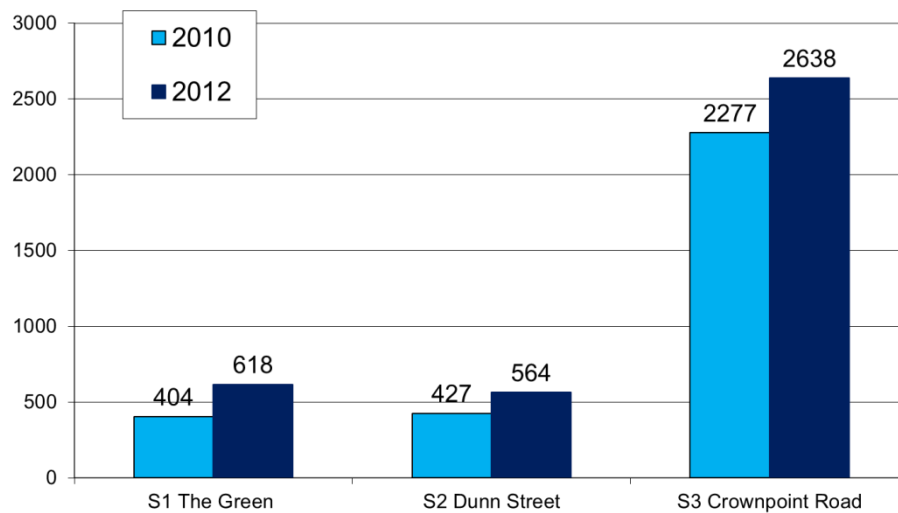
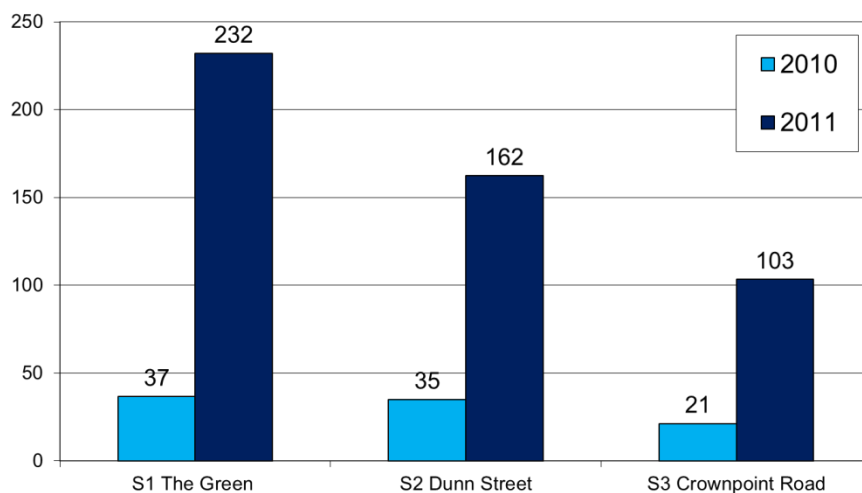


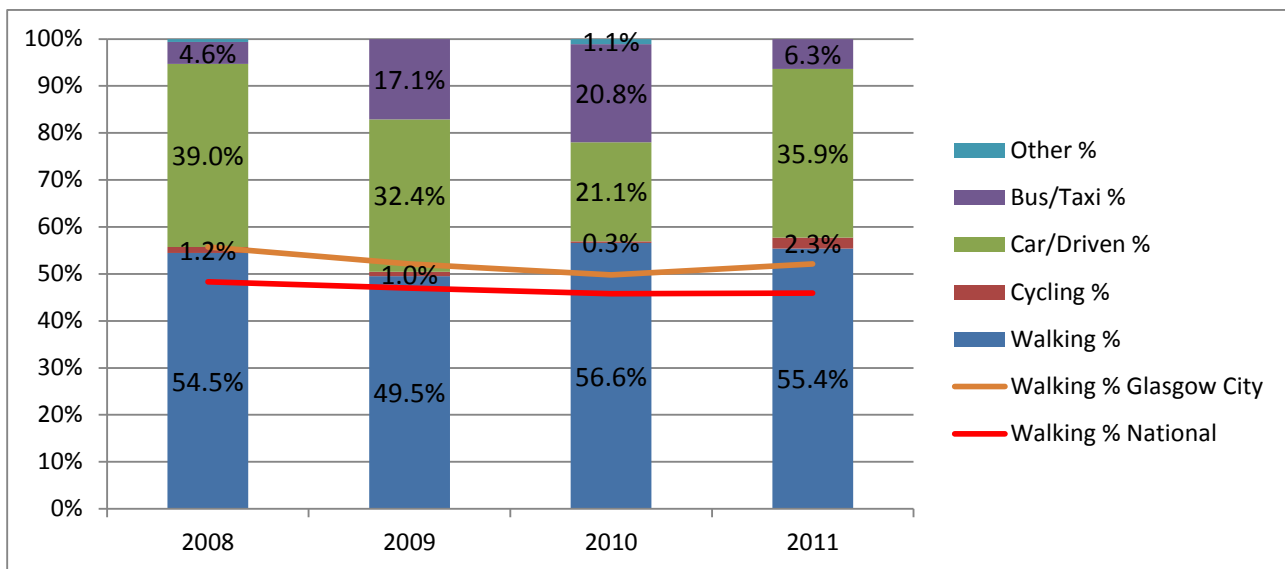
Figure 5.20– 2 Way Cycle Count Data for 2010 and 2012



School Travel

- 5.67 Figure 5.21 shows travel to school mode share, which shows a mixed picture of travel behaviour over the last four years.

Figure 5.21– Mode of Travel to School



Bus patronage data

- 5.68 Bus operators in Glasgow have been reluctant to provide bus patronage data due to commercial sensitivity. First Bus, the major bus operator in Glasgow, have reported a reduction in patronage during the study period, resulting in the frequency or a number of services being reduced.
- 5.69 Glasgow's SCSP project funding was not aimed at encouraging public transport use and the Council has suggested that the reported reduction in patronage may have been due to modal shift to walking and cycling and the impacts of the weak economy. The focus group evidence also suggests that security fears have been growing and the household survey data tends to support this with the significant fall in bus use being matched with significant increase in modes that would be perceived to be safer: taxi, and passenger in a car.

Road traffic

- 5.70 Mid-conurbation cordon traffic counts have been used to establish the change in traffic (Table 5.7). Traffic levels fell between 2009-2011 within the pilot area and across many streets in Glasgow. Streets such as Gallowgate where there has been a fall of 14.6% in traffic in 2011 compared with two years earlier have been bypassed by major new roads so distinguishing between impacts of SCSP and other transport changes is not possible. However investment in local streets and in promoting sustainable behaviour within SCSP is part of overall transport delivery so this research looks at the overall travel behaviour outcomes.

Table 5.7- 5 Day Averages of Traffic in Glasgow in 2009 - 2011 from Central area Traffic Counts

| Location | | 2009 | 2010 | 2011 | Growth between 2009 and 2011 in % |
|----------|----------------------|--------|--------|--------|-----------------------------------|
| A814 | Clydeside Expressway | 53588 | 50820 | 50975 | -4.88 |
| u | Argyle St | 23333 | 21193 | 22763 | -2.44 |
| u | University Ave | 12492 | 12045 | 12540 | 0.38 |
| A81 | Maryhill Rd | 26415 | 18930 | 21698 | -17.86 |
| A879 | Balmore Rd | 21804 | 22011 | 22519 | 3.28 |
| u | Keppochill Rd | 9495 | 8338 | 8102 | -14.67 |
| A803 | Springburn Rd | 29212 | 41810 | 41125 | 40.78 |
| M8 | M8 @ M80 | 166240 | 161444 | 144727 | -12.94 |
| A80 | Cumbernauld Rd | 21812 | 16667 | 19299 | -11.52 |
| u | Duke St | 17825 | 17527 | 15494 | -13.08 |
| A89 | Gallowgate | 20974 | 14423 | 17901 | -14.65 |
| A730 | Glasgow Rd | 21759 | 23662 | 20254 | -6.92 |
| A728 | Aikenhead Rd | 23520 | n/a | 22760 | -3.23 |
| u | Cathcart Rd | 8707 | 8372 | 7441 | -14.54 |
| B763 | Darnley Rd | 11765 | n/a | 9490 | -19.34 |
| u | Nithsdale Rd | 9499 | 9252 | 8002 | -15.76 |
| M77 | M77 @ M8 | 69762 | 72711 | 83159 | 19.20 |
| M8 | M8 @ M77 | 86985 | 64014 | 67550 | -22.34 |
| u | Edmiston Dr. | 11017 | 10496 | 9640 | -12.50 |
| u | Govan Rd | 8700 | 9815 | 8878 | 2.05 |

Summary of travel behaviour outcomes

- 5.71 The evidence about travel behaviour outcomes of the Glasgow On the Move interventions comes from a number of sources and is summarised in Table 5.8. The changes in mode share from the travel diary are compared with the equivalent figures from the SHS survey and corroborating evidence from the remainder of the household survey or other local data sources. Where figures shown are percentage point changes this means, for example, that a change from 21.5% of trips being made on foot to 36.3% is a 14.8 percentage point change.
- 5.72 The main conclusions and observations on travel behaviour that can be drawn are:
- There has been a statistically significant increase in walking and this is contrasted to a reduction in walking in comparable locations as indicated by the SHS data. This is corroborated by the walking counters in Glasgow East End which show an overall increase in walking.
 - Whilst cycle counters suggest an increase in cycling, the overall mode share of cycling showed no statistically significant change and the slight reduction recorded matches the SHS corroborating data and the self-reported frequency data.

- There has been no statistically significant change in car driving, but this is important when contrasted to the increase recorded in the background trend in comparable locations. Car passenger use grew faster than the national trend.
- Bus and train use both fell faster than in comparable locations and this is corroborated by bus patronage figures.

Table 5.8– Summary of evidence on overall travel behaviour change

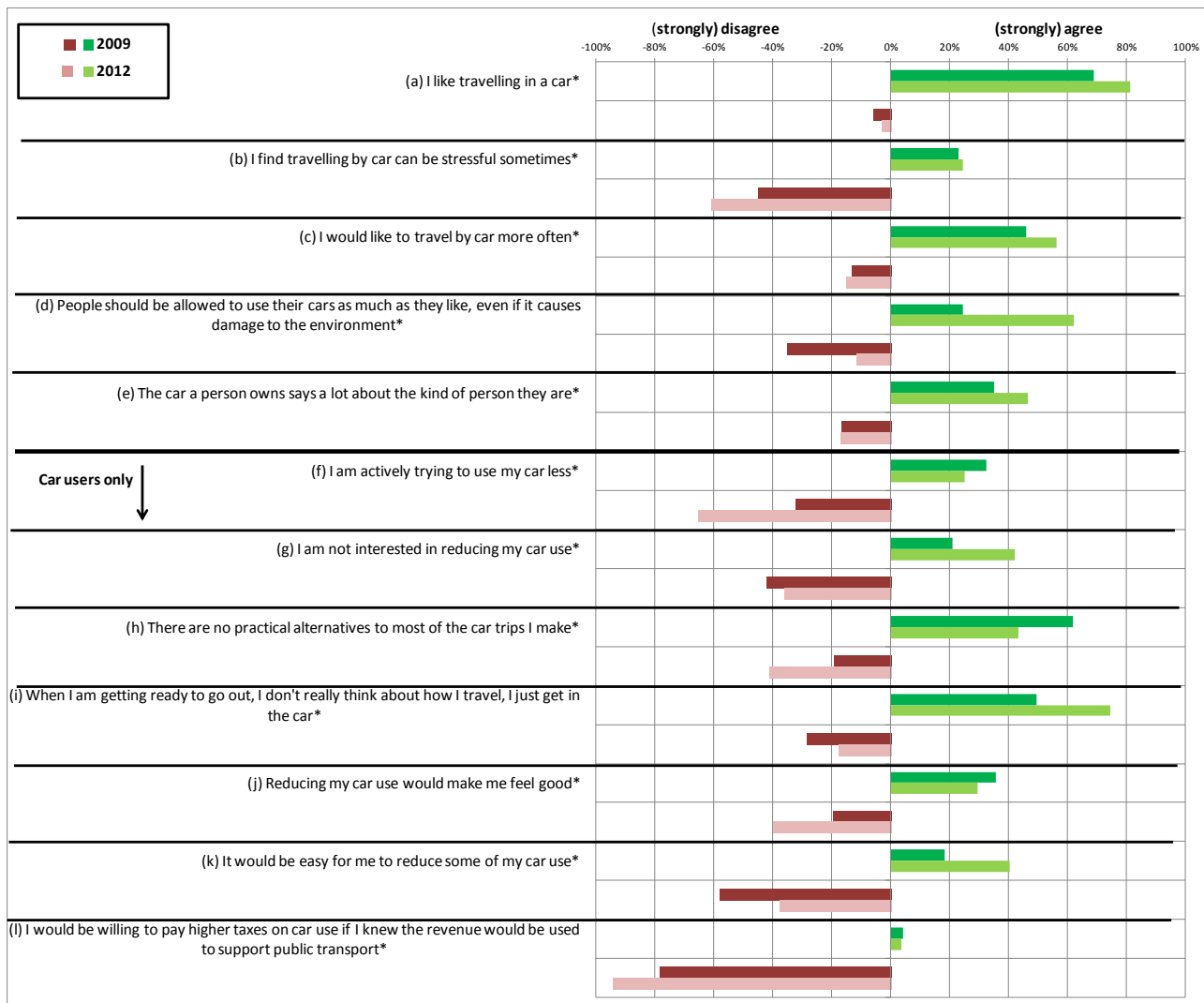
| | Change in trip mode share (main mode) across SCSP target areas | | | Change in trip mode share in comparable areas | Corroborative support for change | | |
|-------------------------|---|-------|----------------|---|---|---|--------------------|
| | From SCSP evaluation travel diaries 2009 - 2012 | | | From analysis of national SHS data 2008-11 | Self-reported frequency from household survey (use > 2 days a week) | Count data | Local user surveys |
| | 2009 | 2012 | %-point change | %-point change | %-point change | | |
| Walking | 41.0% | 46.1% | +5.1 | -2.8 | -4.8 | From a 2007-2009 baseline there has been a 9% rise in walking on cordon counts into pilot area compared to 6% across central area cordon. | N/A |
| Cycling | 0.7% | 0.4% | -0.4 | -0.4 | -0.7 | +10% on cordon counts coming into target area compared to +7.1% across central area cordon | N/A |
| Bus | 26.6% | 20.2% | -6.4 | -0.4 | -7.3 | Bus company reports reduced patronage | N/A |
| Car as driver | 19.8% | 18.2% | -1.6 | +2.7 | -3.5 | -14.6% traffic in Gallowgate – is consistent with wider area | N/A |
| Car as passenger | 5.9% | 9.5% | +3.5 | +1.2 | +2.5 | N/A | N/A |
| Train | 2.1% | 1.0% | -1.1 | -0.1 | -3.7 | N/A | N/A |
| Motorbike | 0.1% | 0.0% | -0.1 | -0.4 | +0.1 | N/A | N/A |
| Taxi | 3.4% | 3.9% | +0.5 | -0.5 | +6.2 | N/A | N/A |
| Notes | <p>Blue shading shows observed change is statistically significant at $p < 0.05$</p> <p>n/a means data not available or not collected</p> | | | | | | |

6.0 Attitudinal Outcomes

Attitudes to the car

- 6.1 Car ownership in the Glasgow East End area is low and this affects attitudes to the car where car ownership is seen as something to aspire to and associated with success. Figure 6.1 shows the changes between 2009 and 2012. Note that question a – e were asked of the whole sample but questions f – I were asked of car users only. All changes are statistically significant.
- 6.2 A notable pattern since 2009 is the increase in positivity towards the car. For instance, more people agree that they like car travel, that they would like to travel by car more often and that people should be allowed to use their cars as much as they like.
- 6.3 Car users seem to have a more protective attitude towards their car travel. For instance, many more car users say they would find it easy to reduce their car use, but a larger proportion in 2012 say they are not interested in reducing their use of the car and they are more likely to just get in the car without thinking about it. Similarly, whilst more admit that there are practical alternatives to many car trips, more also disagree with this statement and fewer car drivers say they are actively trying to reduce it.

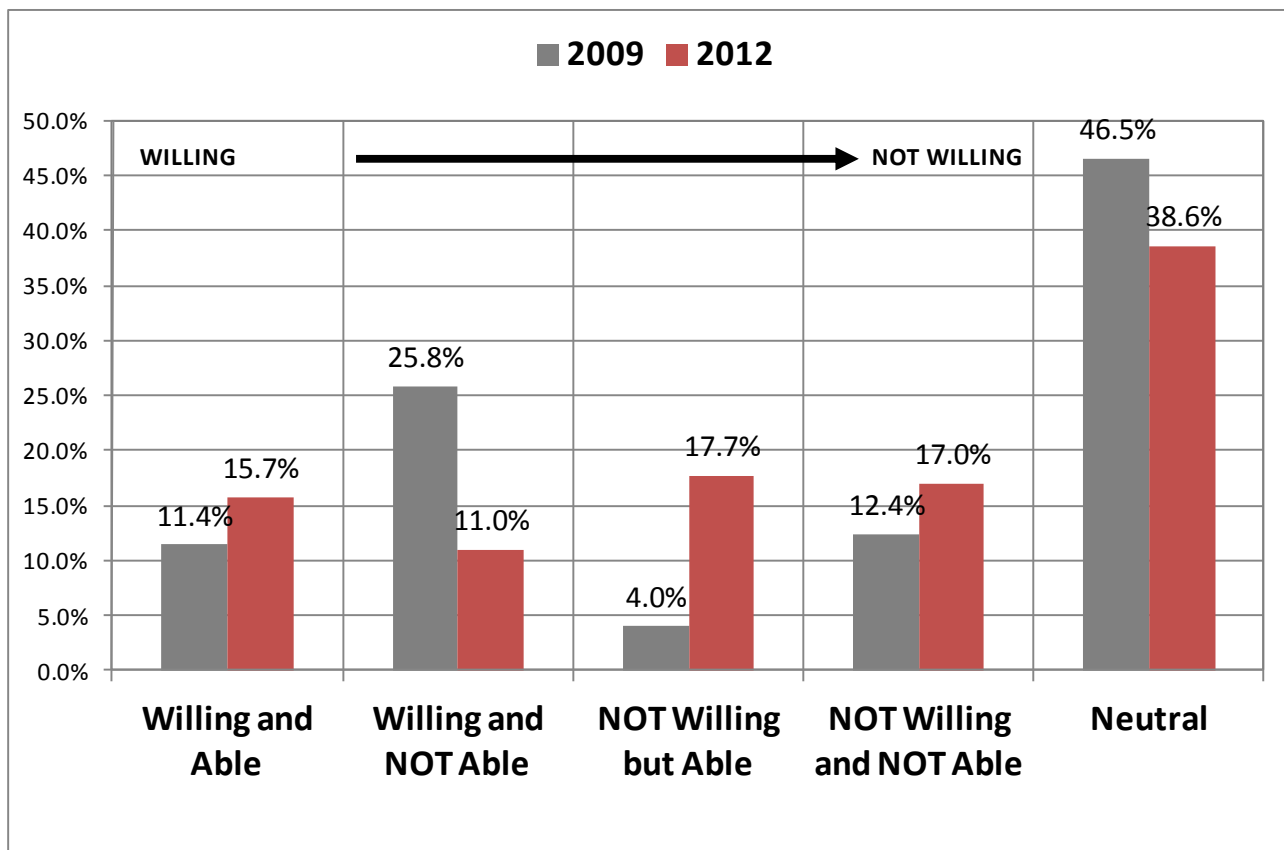
Figure 6.1 - Attitudes to car use in 2009 and 2012



Household survey samples of $N = 1365$, weighted for 2009 and $N = 1044$ for 2012. Samples for individual questions vary. Differences between 2009 and 2012 proportions are significant at $p < 0.05$ for all questions marked with *.

- 6.4 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 not statistically significant between the two years.
- 6.5 The analysis of car attitudes above is echoed in this analysis which shows that the proportion of car users who fall into the 'Not willing but able' category has increased. In other words, a smaller proportion of car users are prepared to contemplate reducing their car use even if they acknowledge it would be possible. There has nevertheless also been a small increase in the proportion of those categorised as 'willing and able'.

Figure 6.2 – Segmentation of attitudes to car use reduction

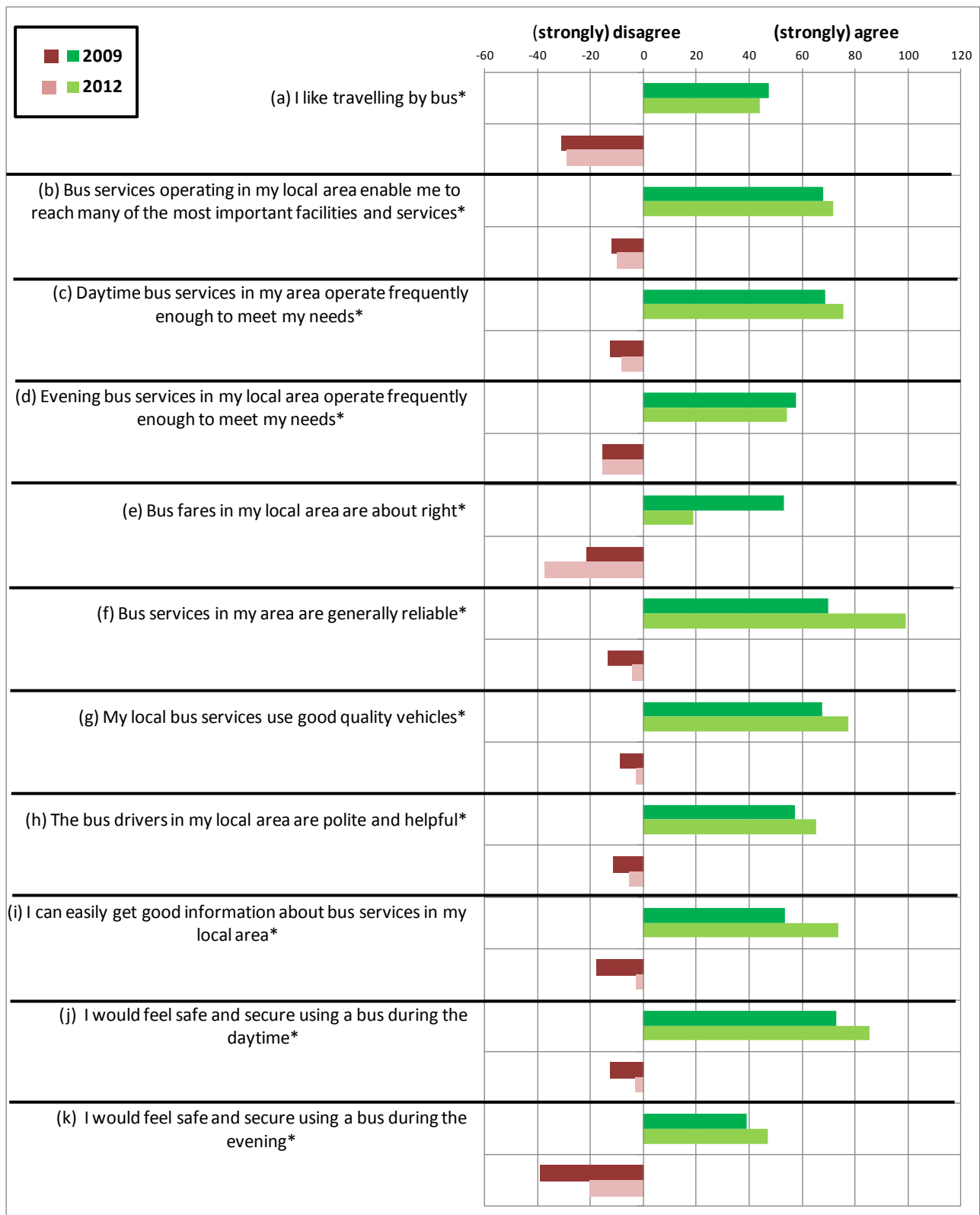


Household survey samples of $N = 1365$, weighted for 2009 and $N = 1044$ for 2012. Samples for individual questions vary. Differences between 2009 and 2012 are statistically significant at $p < 0.05$.

Attitudes to the bus

- 6.6 Attitudes towards many aspects of bus travel appeared to have improved since 2009. Figure 6.3 displays the agree/disagree scores for all the attitude questions in 2009 and 2012. Most notable is the improvement in perceptions of reliability and to some extent personal security. However, there is a marked deterioration in the agreement that bus fares are about right and the belief that bus services enable access to important facilities and services has only improved slightly.

Figure 6.3 - Attitudes to bus travel in 2009 and 2012

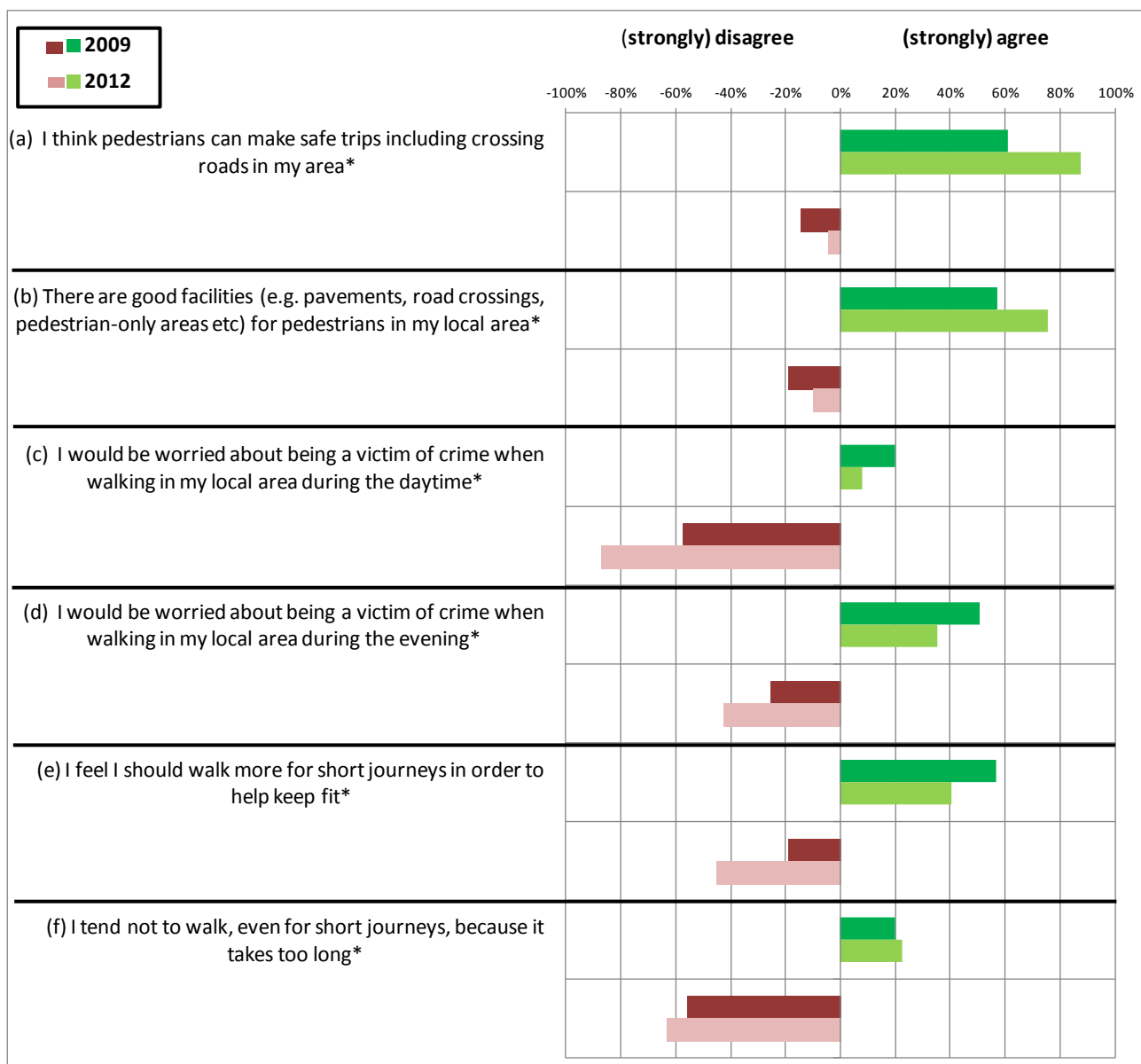


Household survey samples of $N = 1365$, weighted for 2009 and $N = 1044$ for 2012. Samples for individual questions vary. Differences between 2009 and 2012 proportions are significant at $p < 0.05$ for all questions marked with *.

Attitudes to walking

- 6.7 As shown in Figure 6.4, attitudes to some aspects of walking have improved, but others have deteriorated. Glasgow East End residents have improved their perceptions of the walking environment and believe there are safer crossings and pedestrian facilities. There has also been some improvement in the perceptions of personal security with fewer people agreeing and many more disagreeing that they would be worried about being a victim of crime when out and about.

Figure 6.4 - Attitudes to walking in 2009 and 2012



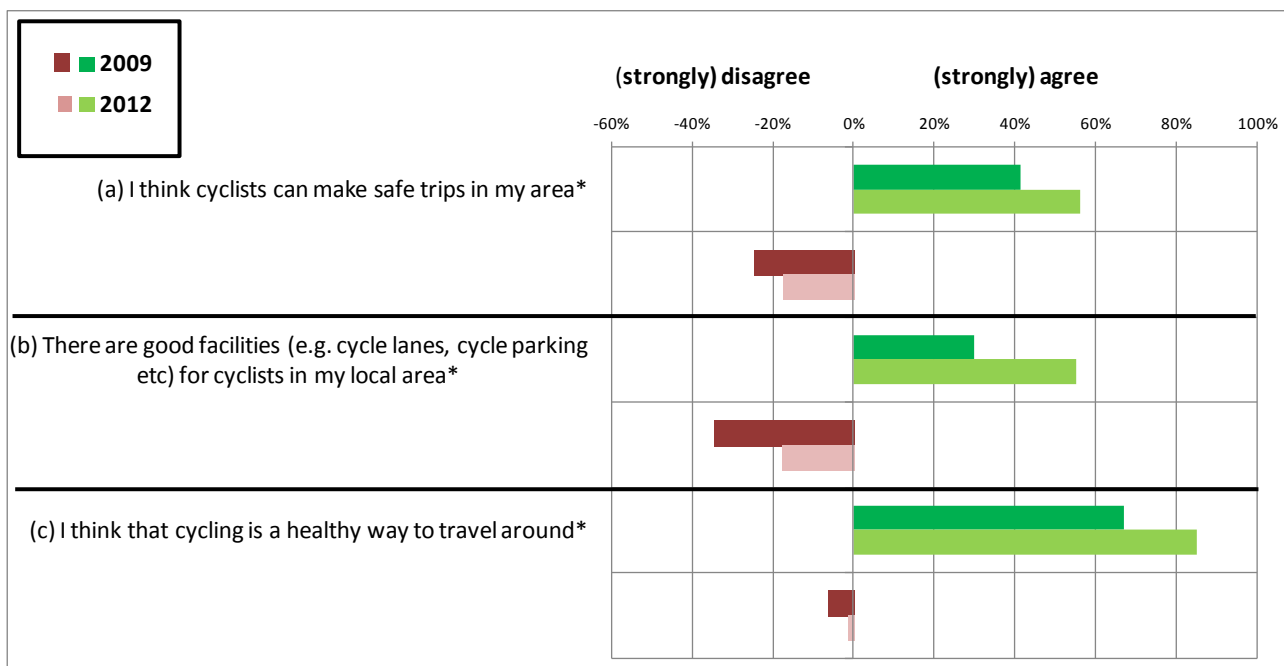
Household survey samples of $N = 1365$, weighted for 2009 and $N = 1044$ for 2012. Samples for individual questions vary. Differences between 2009 and 2012 proportions are significant at $p < 0.05$ for all questions marked with *.

- 6.8 Fewer people in 2012 agree with the statement that they should walk more to keep fit (and more disagree) although slightly more people in 2012 disagree with the idea that they do not walk because it takes too long.

Attitudes to cycling

- 6.9 Attitudes to cycling have also improved. More people agree (and less disagree) 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 also been an increase 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

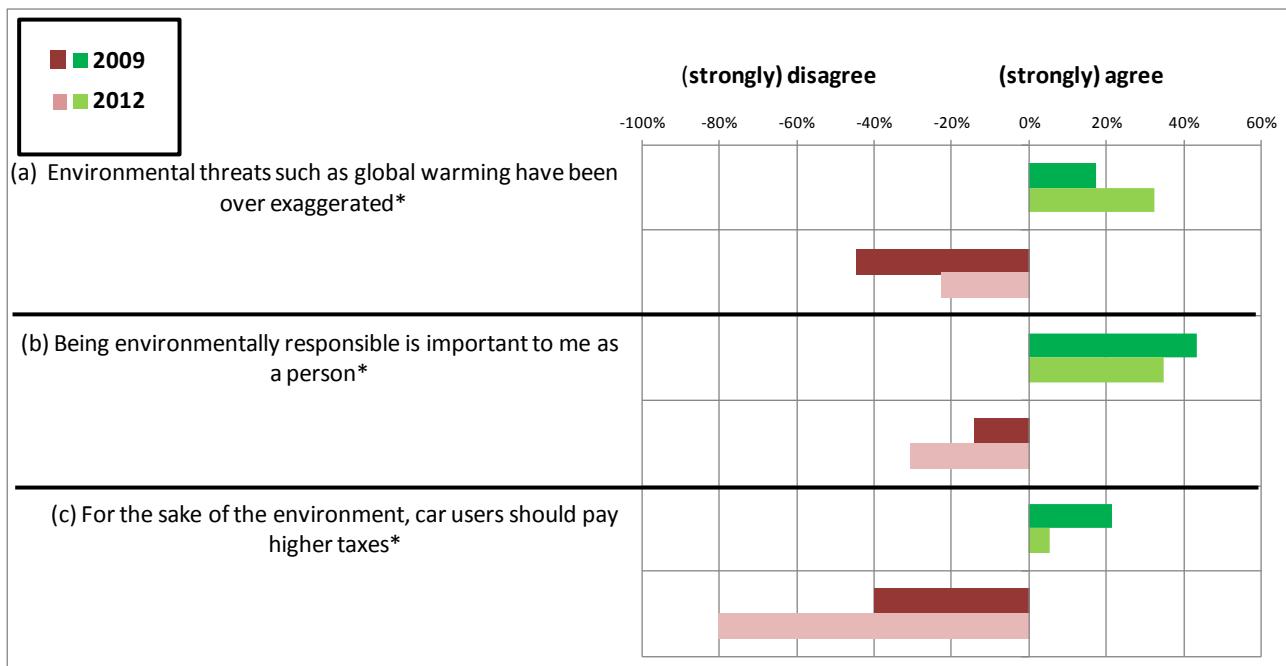


Household survey samples of $N = 1365$, weighted for 2009 and $N = 1044$ for 2012. Samples for individual questions vary. Differences between 2009 and 2012 proportions are significant at $p < 0.05$ for all questions marked with *.

Attitudes to the environment

- 6.10 Glasgow East End residents appear more skeptical with regard to environmental issues. Since 2009, more people agree (and fewer disagree) that environmental problems have been exaggerated and there is less agreement to the idea that being environmentally responsible is important. Also, unlike the question asked only to car drivers above, there is also less sympathy with the idea that car drivers should pay higher taxes.

Figure 6.6 - Attitudes to the environment in 2009 and 2012

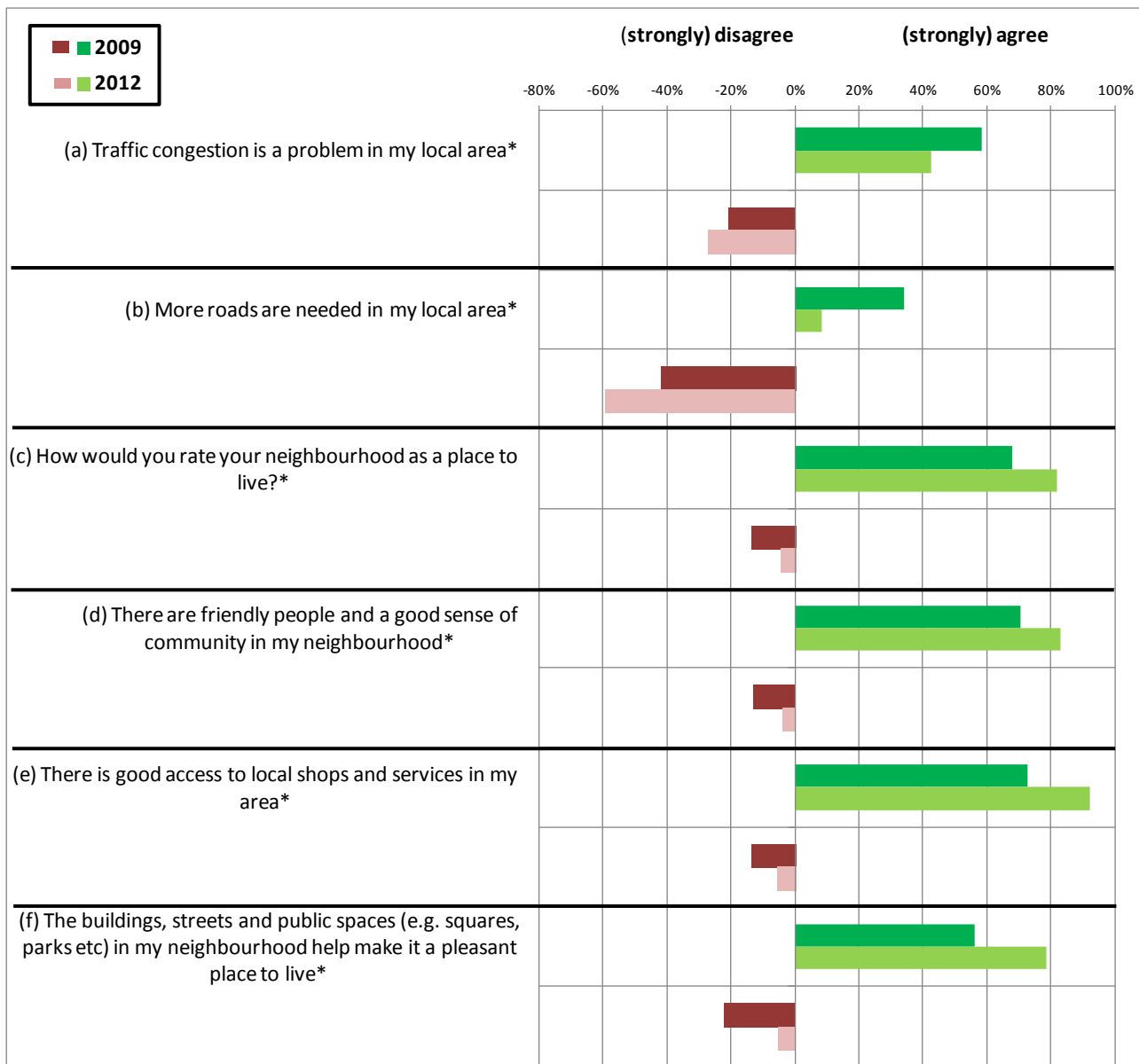


Household survey samples of $N = 1365$, weighted for 2009 and $N = 1044$ for 2012. Samples for individual questions vary. Differences between 2009 and 2012 proportions are significant at $p < 0.05$ for all questions marked with *.

Attitudes to the local neighbourhood

- 6.11 Figure 6.7 shows a reduction in the degree to which congestion is seen as a problem in Glasgow East End and fewer people believe that more roads are required. On other neighbourhood indicators, there has been some improvement in perceptions. Overall rating of the neighbourhood has improved 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.

Figure 6.7 Attitudes to the local neighbourhood in 2009 and 2012

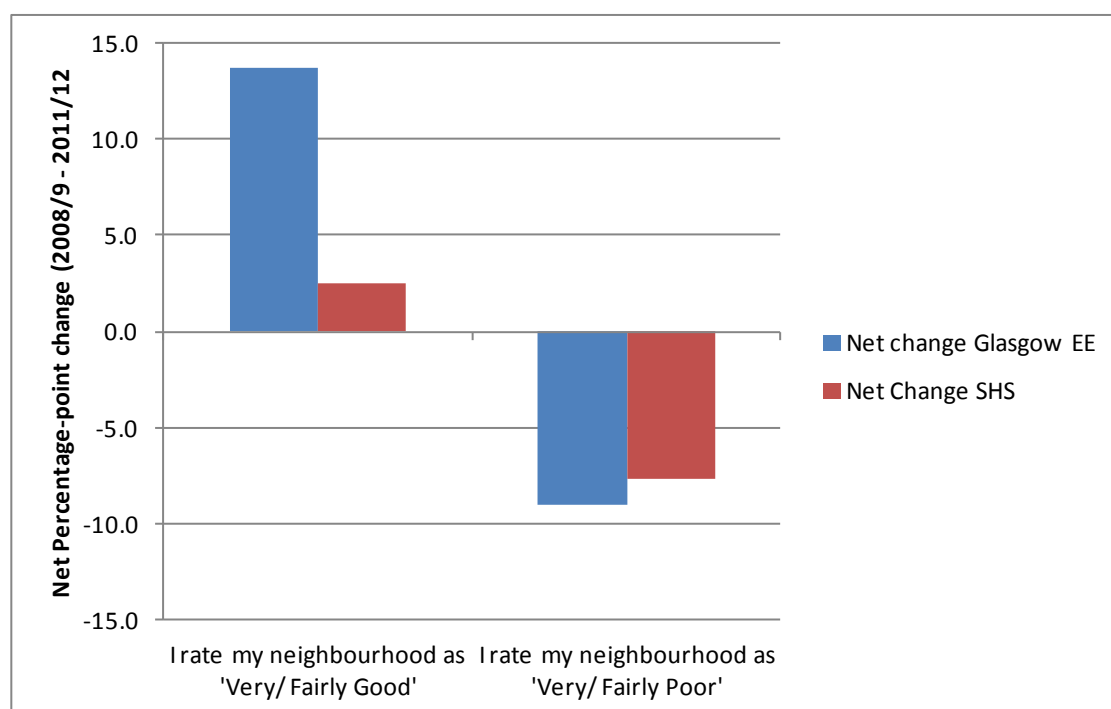


Household survey samples of $N = 1365$, weighted for 2009 and $N = 1044$ for 2012. Samples for individual questions vary. Differences between 2009 and 2012 proportions are significant at $p < 0.05$ for all questions marked with *.

Comparison with SHS statistics

- 6.12 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 towns. There has also been a small reduction in the number rating it as poor. There has also been a slightly 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)

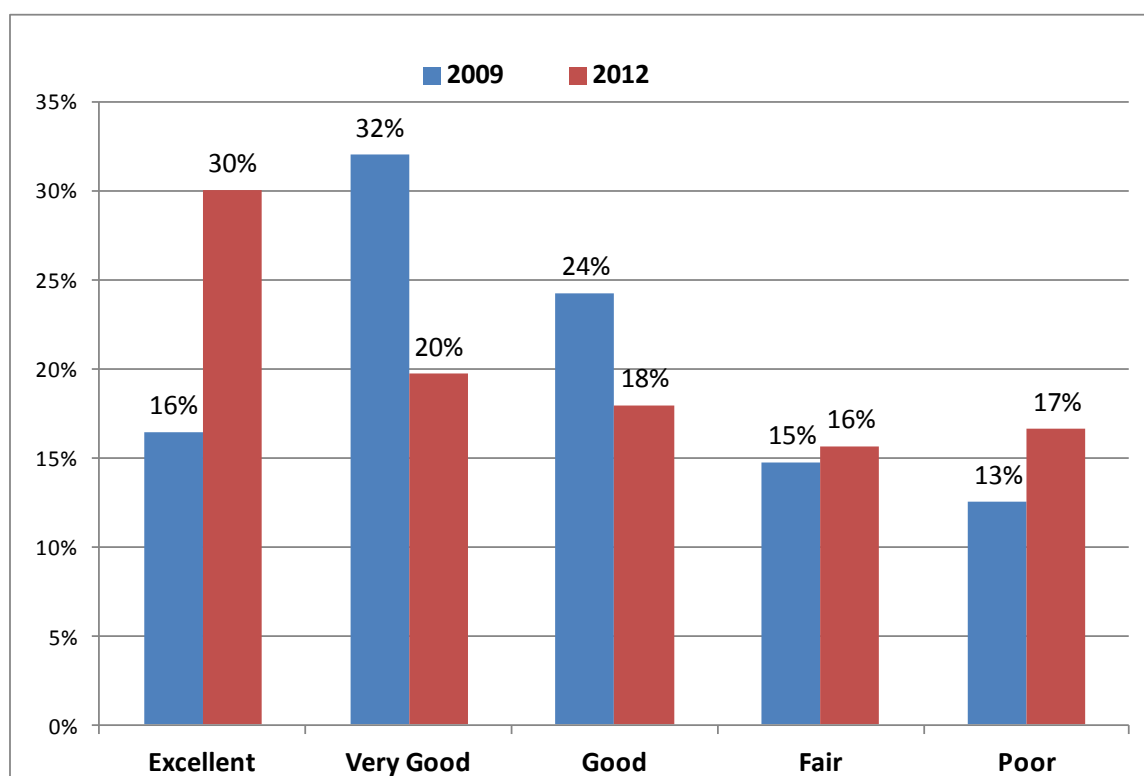


Household survey samples of $N = 1365$, weighted for 2009 and $N = 1044$ for 2012. Differences between 2009 and 2012 proportions in SCSP sample on the neighbourhood rating question are significant at $p < 0.05^*$.

Self-reported health and physical activity

- 6.13 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.
- 6.14 Figure 6.9 summarises the responses to self-rating of general health in 2009 and 2012. This shows that there has been an increase in the proportion of people who say their health is excellent (from 16% to 30%). This is the only SCSP intervention area that has seen such an increase, although there has also been a drop in those that report their health as very good or good. When broken down by gender (Figure 6.10), the increase in the number of people reporting excellent health is spread evenly across the sexes, but there has been a greater increase in females reporting poorer health in 2012.

Figure 6.9 - Ratings of general health in 2009 and 2012



Household survey samples of $N = 1365$, weighted for 2009 and $N = 1044$ for 2012. Differences between 2009 and 2012 proportions are significant at $p < 0.05$.

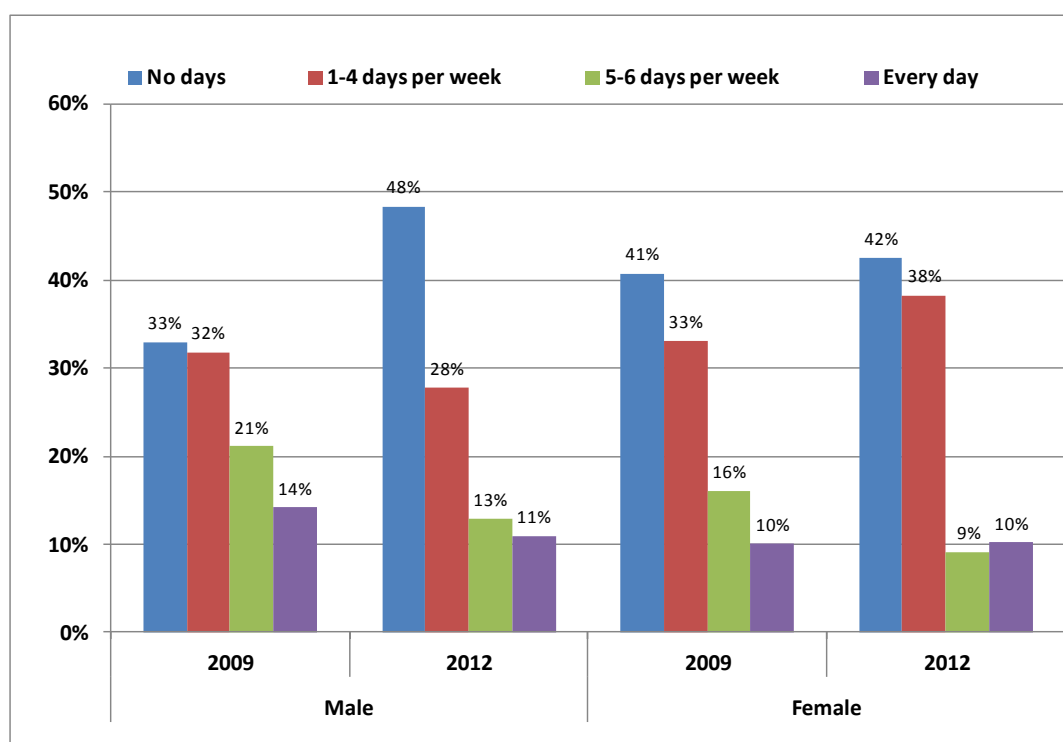
Figure 6.10 - Ratings of general health by gender in 2009 and 2012



Household survey samples of $N = 1365$ (Male $N=635$, Female = 707), weighted for 2009 and $N = 1044$ for 2012 (Male $N=494$, Female = 550). Differences between 2009 and 2012 proportions are significant at $p < 0.05$.

- 6.15 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 week¹². There is a long term target in Scotland for 50% of all adults over 16 to meet this level by 2022.
- 6.16 Overall, in 2009 30.2% of the sample undertook this level of exercise and this had reduced to 21.5% in 2012. Also important is the reduction in the number of people who say they exercise on 'no days' but this only fell from 11.9% to 10.5%.
- 6.17 Figure 6.11 looks at physical activity levels by gender. Here we see that more men are reaching the target (=every day + 5-6 days per week) but both sexes have seen a reduction over the period. For women, there has been an increase in the number undertaking activity on 1-4 days a week but it does not seem that this has been achieved by a reduction in the number of people active on 'no days'. Third of men and 42% of women in Glasgow East End still undertake no physical exercise at all.

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

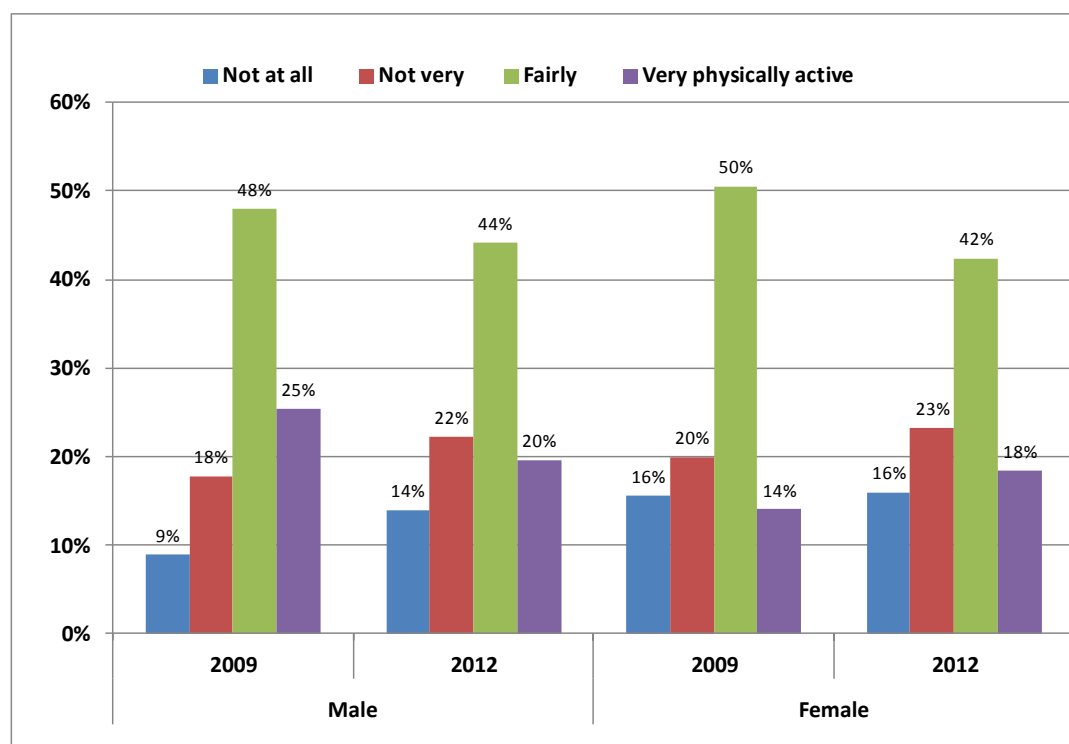


Household survey samples of $N = 1365$ (Male $N=635$, Female = 707), weighted for 2009 and $N = 1044$ for 2012 (Male $N=494$, Female = 550). Differences between 2009 and 2012 proportions are significant at $p < 0.05$.

¹² <http://www.scotland.gov.uk/Topics/Health/health/Introduction>

- 6.18 Respondents were also asked to record how physically active they are at work or college. Overall, there was no statistically significant change in the self reported levels of work/college physical activity in Glasgow East End. However, when males and females are analysed separately, the changes are significant. Activity by men has fallen more than women. Those who say they are fairly or very active at work have reduced from 73% to 64% (combined) for men and 64% to 61% for women.

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



Household survey samples of $N = 1365$ (Male $N=635$, Female = 707), weighted for 2009 and $N = 1044$ for 2012 (Male $N=494$, Female = 550). Differences between 2009 and 2012 proportions are significant at $p < 0.05$.

Comparison with the Scottish Health Survey

- 6.19 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 Glasgow East End have shown a 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 slightly more than in the Health Board Region, and the number of people reporting poor health has increased slightly more.
- 6.20 With respect to the physical activity target, there is a 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 Glasgow East End and Scottish Health Survey between 2009-12 or 2008-10

| | %point Change | |
|---------------------------------------|--|--|
| | Glasgow East End SCSP (2009 – 2012) | Scottish Health Survey^ (2008 – 2010) |
| How is your health in general? | | |
| <i>Excellent~/ Good/ Very</i> | -5.0 | -3.0 |
| <i>Fair</i> | +0.9 | +1.0 |
| <i>Poor</i> | +4.1 | +3.0 |
| Physical Activity Target | | |
| <i>% reaching the target</i> | -8.7 | -1.0 |

^ Greater Glasgow 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 infrastructure 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 these questions were not asked in 2009, we cannot compare the answers over time to see how things have changed. As a result, we present here for comparison the data from the comparator areas¹³ from which we also collected data for this evaluation. This allows us 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 questions¹⁴.

Perceptions of improvements to transport infrastructure and services

- 7.2 Figure 7.1 compares scores for Glasgow East End and the comparator sample on various questions about infrastructure and service improvements. It can be seen that, compared to the comparator, Glasgow East End residents are more convinced that their area has witnessed improvements to various transport related services. Most notable is the much greater acknowledgement that the built environment, cycling routes and public transport information has improved. Walking routes and pedestrian crossings and to a lesser extent information about cycling were also judged as having improved more than the background trend.

Awareness and understanding of the SCSP programme

- 7.3 In order to gauge recognition of the branding that had been used during the SCSP programme, respondents were asked if they had heard of the Glasgow East End On the Move programme (or an equivalent campaign in the comparator areas)¹⁵. Figure 7.2 shows that only 7% said they had heard of the campaign, compared to 11% in the comparator sample. More people recognised the logo (19%), but overall this was a low level of recognition for the campaign compared to other SCSP locations. It can be hard to communicate local messages within cities as national news tends to dominate more than in smaller towns. The On the Move campaign was launched in 2010 and the campaign continued through till 2012 unlike some of the other pilot areas where the campaigns started and ended earlier. The discussion in the focus groups suggested that some initial non-recognition was related to response bias as although people were able to recall

¹³ With weightings applied so as to ensure the same demographic matching from the comparator samples. See the main report for an explanation.

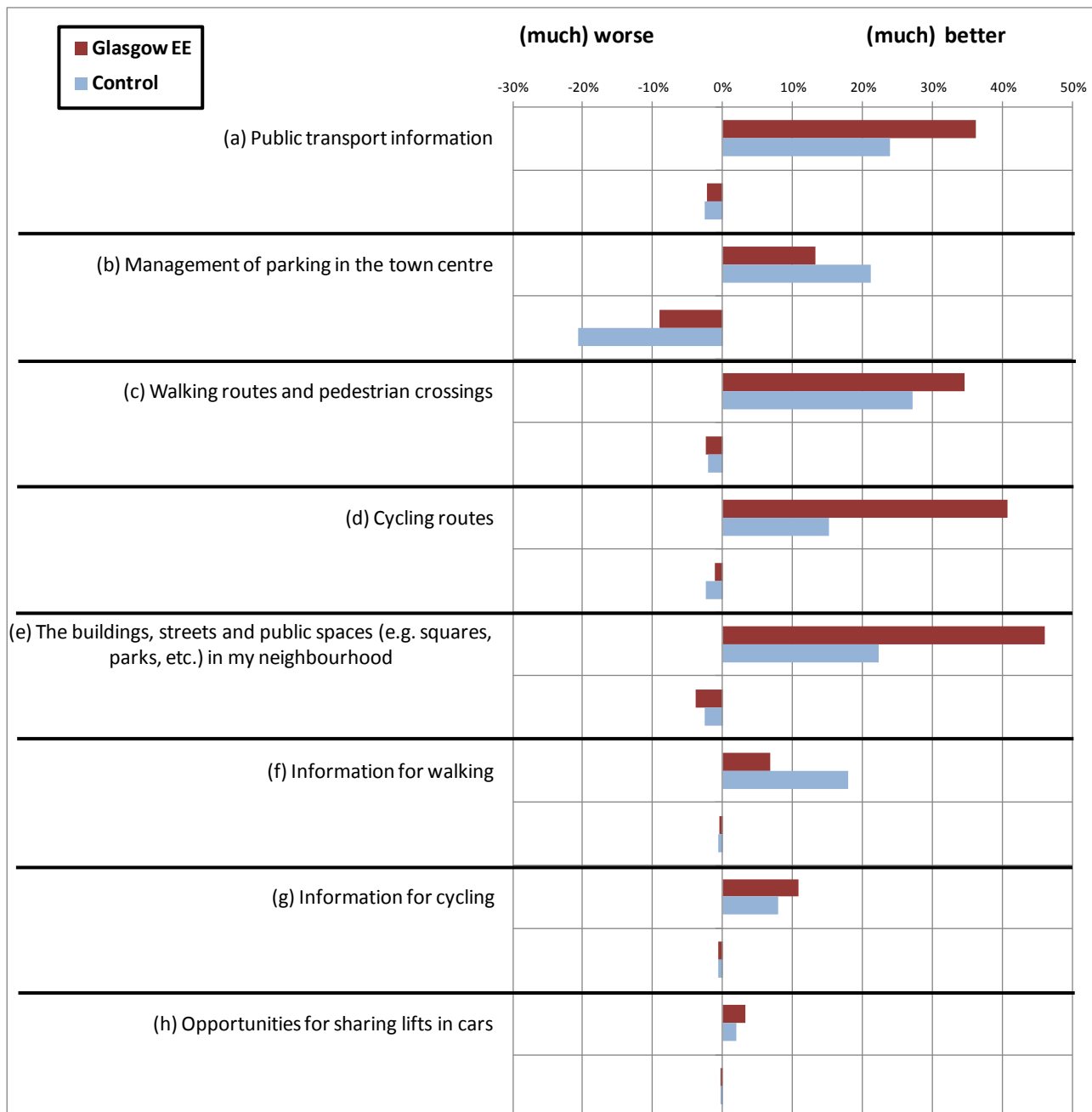
¹⁴ i.e. the idea that a proportion of people are likely to say they recognise something even when they don't and we assume this tendency is the same in both the SCSP area and the comparator towns.

¹⁵ Arbroath: Travelwise Angus; Bearsden: Stepchange; Dalkeith: Travel wise.

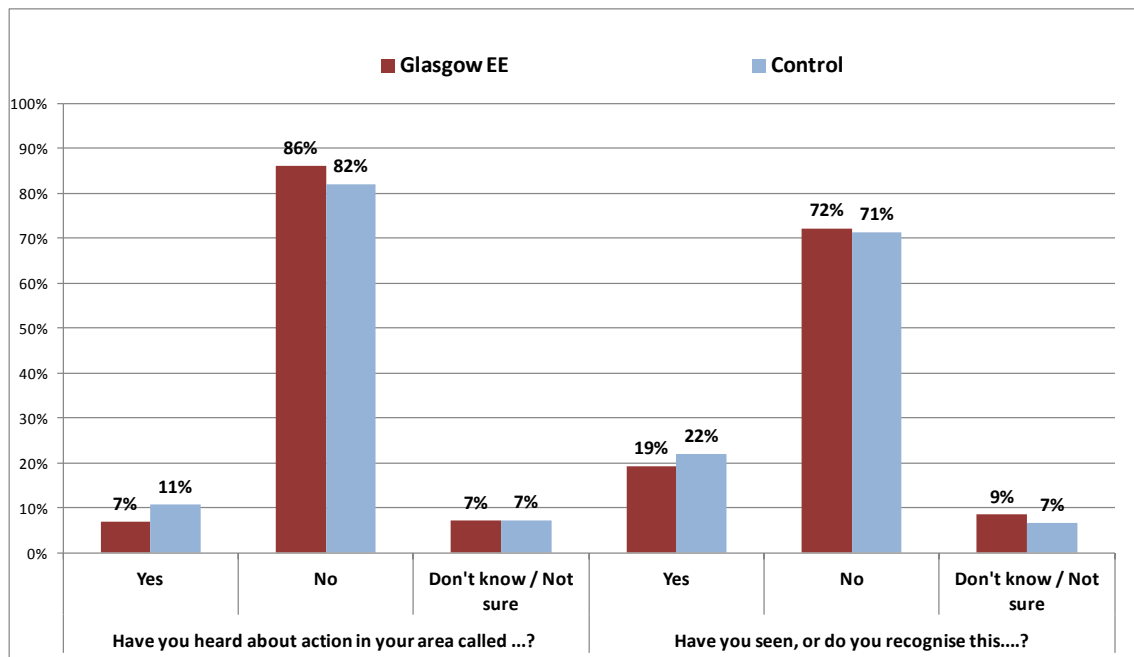
seeing the banners and posters, they felt that the messages were not appropriate and tried to ignore them.

- 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 'don't know' was a popular answer at 38% of the sample, but for those that did give an idea for what the campaign was about, the greatest number identified the purpose as being to encourage activity. 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. Although the branding was shown on new infrastructure the campaign was not as closely related to the infrastructure investment as in some of the pilot areas. On the Move had broad aims to save money and improve health with the billboards being located mainly in places not directly connected with new investment.

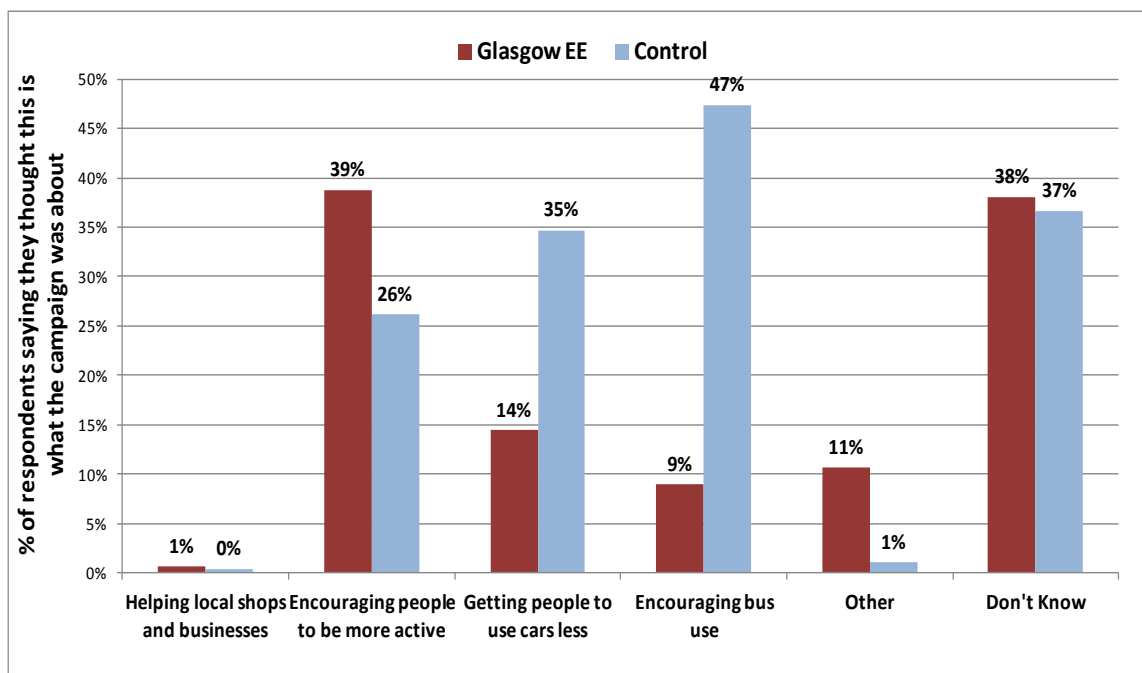
Figure 7.1 - Comparison of perceived changes to infrastructure and services in Glasgow East End and comparator area



Household survey samples of $N = 1044$ (for Glasgow East End weighted in 2012) and $N = 772$ (for comparator area 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 Glasgow East End and in the comparator area

Household survey samples of N = 1044 (for Glasgow East End weighted in 2012) and N= 772 (for comparator area weighted in 2012) Samples for individual questions vary.

Figure 7.3 - Understanding of the SCSP brand in Glasgow East End and in the comparator area

Household survey samples of N = 1044 (for Glasgow East End weighted in 2012) and N= 772 (for comparator area weighted in 2012) Samples for individual questions vary.

8.0 Impacts of the Glasgow East End SCSP Programme

- 8.1 The SCSP programme implemented in Glasgow East End 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 Dundee SCSP Programme

| Policy aim | Direction of impact relative to policy aims | Commentary |
|--|---|---|
| Economy | | |
| Reducing the cost of travel | Positive | <ul style="list-style-type: none"> • Savings have been made due to reduced use of cars and the increased proportion of walking trips. |
| Travel time savings | Neutral | <ul style="list-style-type: none"> • The small reductions in car trips will be reducing delays to all road based travel modes. • The increased proportion of trips made on foot is a dis-benefit as people spend longer travelling more slowly. |
| Net benefits to transport operators | Neutral | <ul style="list-style-type: none"> • Bus patronage has fallen by more than in the comparator area but the process evidence suggests that the impacts are probably more due to factors other than SCSP. |
| Wider economic benefits and location impacts | Neutral | <ul style="list-style-type: none"> • None identified. |
| Accessibility | | |
| Access to opportunities | Neutral | <ul style="list-style-type: none"> • No benefits identified. |
| Social inclusion and community development | Positive | <ul style="list-style-type: none"> • The community outreach work has supported health and community development through training and participation in active travel events. |
| Environment | | |
| Emissions | Positive | <ul style="list-style-type: none"> • Reductions in car trips have led to small reductions in greenhouse gas emissions. |

| Policy aim | Direction of impact relative to policy aims | Commentary |
|---|---|---|
| Air quality impacts | Neutral | <ul style="list-style-type: none"> None identified. |
| Cultural heritage and townscape | Neutral | <ul style="list-style-type: none"> People are concerned about the culture of the area being changed but progress has been made paving the way for the positive cultural benefits of working towards the East End Regeneration. |
| Integration with Health, Regeneration and other Policies | | |
| General health | Neutral | <ul style="list-style-type: none"> Self perception of health has declined. |
| Physical activity levels | Neutral | <ul style="list-style-type: none"> People are less active particularly men. There is more walking and cycling |
| Regeneration and land use planning | Positive | <ul style="list-style-type: none"> SCSP programme has been well integrated with the wider City Council plans for East End Regeneration. |
| Political value of changes | Neutral | <ul style="list-style-type: none"> No political benefits identified. |
| Safety | | |
| Personal security | Neutral | <ul style="list-style-type: none"> No firm evidence was identified about actual security issues as a result of the investment. |
| Road safety | Positive | <ul style="list-style-type: none"> People consider that the road safety for cyclists has improved, although much of this may be due to the new M74 and Clyde Gateway road construction reducing traffic levels. |

9.0 Learning Points

9.1 Glasgow City Council Land & Environmental Services has successfully developed a culture of joint working with other public agencies and local businesses. The SCSP project has helped pilot ways of working that are being deployed on the Commonwealth Games planning. The time invested in SCSP developed new relationships and ways of organising and co-ordinating provision and promotion.

9.2 Learning points have been that:

- Stability, training, community engagement and personal security have been the keys to successful delivery within this relatively deprived area.
- Although attitudes to car travel have become more positive it is levels of walking that have risen.
- Scheme promotion needs to take time to get communities on board. Going too fast can undermine the aims to change attitudes in the area. People and stakeholders need time to be consulted and to get behind proposals.
- The support of the Glasgow East End Regeneration Agency (GEERA) was vital to build cross sectoral networks in the area. The SCSP initiatives have been managed as a sub-group within GEERA with delivery supported through the partners group, the interest groups and the bike groups.
- Part of the regeneration programme has challenged some local cultures so the campaigns have been required to balance policy aims with local acceptability. There have been positive perceptions of the recent changes in the local environment.
- The reliance on social enterprises to deliver more innovative projects and good value for money helped the Council to gain acceptance for the SCSP measures.
- Personal safety is seen as an important factor affecting quality of life in the area. The path network will not address some important safety concerns until the Commonwealth Games construction is completed so may continue to be perceived negatively with some local people.
- Whilst community organisations were grateful for grant assistance for materials and other expenses, it was highlighted that for some, their main concern was the need to pay for staff costs. This element was not eligible for assistance from the Smarter Choices Community Cycling fund.