Transport, Connectivity & Sustainability O&S Committee

Scrutiny Inquiry:

Changing Gear

Transforming Urban Movement through Cycling and Walking in Birmingham

Written Evidence

2013

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About Sustrans

Sustrans makes smarter travel choices possible, desirable and inevitable. We're a leading UK charity enabling people to travel by foot, bike or public transport for more of the journeys we make every day. We work with families, communities, policy-makers and partner organisations so that people are able to choose healthier, cleaner and cheaper journeys, with better places and spaces to move through and live in.

It's time we all began making smarter travel choices. Make your move and support Sustrans today.

We're a catalyst - we make smarter travel choices possible.

We campaign - we make smarter travel choices desirable.

We influence - we make smarter travel choices inevitable

Annual Review -find out how our work is changing the lives of more than three million people throughout the UK.

Download Sustrans' Annual Review for 2011

Summary of Key Points

1. Cycling will contribute towards several public health outcomes, for which the City Council will be responsible from April 2013 onwards
2. Develop relationships to ensure that a common vision for cycling is shared with other key organisations including Centro, key business organisations and the local NHS
3. Set an aspiration for cycling modal share
4. Cycling policy must be integrated with a wider transport policy that includes demand management of motor traffic (the key lesson from Birmingham's participation in the EU cycling policy benchmarking exercise back in 2001)
5. Ensure that infrastructure and behavioural interventions happen in the same local areas so complement each other
6. Work towards creating a road environment where all journeys in the city can be cycled with BikeAbility Level 2 skills
7. Develop a more clearly defined infrastructure plan for cycling that will better enable funding opportunities to be captured and behavioural interventions to be better integrated
8. More widespread 20mph limits will bring substantial health, environmental and social benefits, of which more & safer cycling is just one
9. Work towards a total expenditure on cycling of £10 per head per annum – experience elsewhere suggests this is required to fully release the potential of cycling
10. Have a debate about getting the right balance between developing city centre and suburban cycling – in theory there should be more scope in the latter, but growth in cycling in other cities is often led by more cycle commuting into the city centre
11. Work with Centro & neighbouring districts to develop a WM-wide vision for cycling that ensures the above is complemented by similar work in the rest of the conurbation
12. Address the locally relevant points in the Times' Cities fit for Cycling campaign
13. Use the experience developed by Sustrans in other parts of the UK

Sustrans' response to: **Scrutiny Inquiry: Alternative Transport: Cycling in the city; the city's canals**

14. Note that although there may be an initial increase in the absolute number of cycle casualties, more cyclists on the roads will mean fewer casualties per mile travelled
15. There's plenty of scope to make more use of canal paths in the city for cycling, but they shouldn't be seen as substitutes for good road routes because of limitations in directness, safety and capacity

The development of cycling in Birmingham requires:

1. Clear vision and strategy for increasing cycling backed by a detailed plan for investment and delivery
2. Packages of measures including capital infrastructure for cycling such as routes, and behavioural measures focusing on key destinations and trip generators such as schools, workplaces and public transport interchanges.
3. Sustained and high levels of investment in cycling
4. Supportive measures such as introduction of 20mph and integration into planning decisions etc
5. Partnership within LAs, with public health and planning, and with the 3rd sector and community

We welcome the review of both cycling and canals. Birmingham benefits from many canals and there is scope for the canal network to play a key role in developing a more widespread, coherent, high quality and integrated strategic network of walking and cycling routes in Birmingham, particularly in central locations where the canal network is dense and road space is at a premium, and in attracting tourist and leisure use. This needs to be seen as part of a wider strategy for increasing cycling, supported by appropriate targets. leadership and levels of investment.

Some milestones in development of cycling policy, personnel and funding in Birmingham:

1987 First recognition of cycling as something to be encouraged. David Davies appointed as first cycling officer (part-time)
1991 Roger Boulter takes over as cycling officer and maps some key side street and green corridor routes which are later implemented gradually (Rea Route, Stratford Road parallel route, Ward End route etc.)
1996 Andrea Lewis Birmingham cycling officer. Develops first comprehensive cycling strategy for city (adopted 1997)
1999 Graham Lennard Birminghams cycling officer.
2000 Step change increase in investment in cycling in city, up to about £1m p.a., as part of first LTP.
2001 Birmingham participates in BYPAD – EU comparison of city cycling policies. Main conclusion is that cycling policy must integrate better with a wider transport policy that manages demand for car use.
2004 First use of National Standard cycle training with selected schools (fully adopted in 2007)
2007 Sustrans wins 50 million Big lottery funding so Connect2 in Birmingham can be funded
2008 Cycle city bid unsuccessful
2008-12 Sustrans provides funding to Links to School schemes in Birmingham
2011 New cycling strategy developed
2011 LSTF funding for Bike North Birmingham
2012 LSTF funding for Centro: "Smart Routes, Smarter Choices" including 5 corridors in Birmingham

Cycling Questions

1. How can we encourage cycling	Sustrans report *Cycling in the City Regions*, http://www.sustrans.org.uk/assets/files/rmu/110411_Cycling_in_the_city_regions_Sustrans_PTEG_report_final.pdf produced in collaboration with PTEG and the PTEs including Centro looked at the potential for increasing cycling in English conurbations and made

in the city that is efficient and safe, getting people from A to B desirably and sustainably linking urban areas?	recommendations on how to achieve a step change. Close to 50% of all metropolitan trips are of less than 5km and could therefore be made within 20 minutes by an average cyclist. Yet, at present, more than half of all such journeys are made by car. Lower average operating speeds for motorised traffic, chronic congestion levels, high population densities, high parking charges and the substantial cost of alternative interventions all mean that cycling measures could be both highly cost effective and deliver substantial change in travel behaviour across the city regions. Evidence suggests that three in ten car journeys could potentially be shifted to cycling, walking and public transport without significant infrastructure changes or restrictions to car use. The greatest potential for changing travel behaviour lies in increasing cycling, providing a viable alternative to nearly one in three local car journeys. A wide range of practical interventions have been proven to increase cycling levels, and there is a growing body of evidence on the most effective approaches, notably from the DfT-funded Sustainable Travel Towns (STT) and Cycling Demonstration Towns (CDT) programmes. In the STTs, car driver trips per resident fell by 9% between 2004 and 2008, whilst cycle trips increased by 26-30%. In the CDTs, cycling levels increased by 27% from 2005 to 2009. In Darlington, where the two approaches were combined, cycling levels more than doubled. This work suggests that the following set of measures form the cornerstones of successful cycling strategies: • **A clear vision and strategy for increasing cycling backed by a detailed plan for investment and delivery** • **Packages of measures including capital infrastructure for cycling such as routes, and behavioural measures focusing on key destinations and trip generators such as schools, workplaces and public transport interchanges.** • **Sustained and high levels of investment in cycling** • **Supportive measures such as introduction of 20mph and integration into planning decisions etc** • **Partnership within LAs, with public health and planning, and with the 3rd sector and community** **<u>The role of 20mph limits</u>** There is plenty of evidence on the benefits of 20 mph – the organisation 20's plenty http://www.20splentyforus.org.uk/ has extensive information, however here are some headline benefits: **We need new policies to make our roads safer** Almost 3,000 people die each year on roads in England; a person is seriously injured every 20 minutes **20mph speeds reduce accidents and casualties** Accidents have fallen by 60% in 250 of the 20mph schemes across Great Britain http://webarchive.nationalarchives.gov.uk/20110304132839/http://cfit.independent.gov.uk/pubs/2001/ebp/ebp/stage3/index.htm **20mph speeds are safer for pedestrians** As vehicle speeds increase over 30km/h (18.6mp/h) the proportion of pedestrians killed rises rapidly

45% of pedestrians are killed when hit by a car travelling at 50km/h (31mph)

In London, extending 20mph zones to roads with >0.7 casualty per km per year could reduce pedestrian casualties by 114

20mph speeds are safer for children

Accidents involving children have fallen by 67% in 250 of the 20mph schemes across Great Britain

http://webarchive.nationalarchives.gov.uk/20110304132839/http://cfit.independent.gov.uk/pubs/2001/ebp/ebp/stage3/index.htm)

20mph speeds are safer for cyclists

Accidents involving cyclists have fallen by 29% in 250 of the 20mph schemes across Great Britain

http://webarchive.nationalarchives.gov.uk/20110304132839/http://cfit.independent.gov.uk/pubs/2001/ebp/ebp/stage3/index.htm

Active travel and public health

20mph limits will encourage walking and cycling

Modifying the physical environment - including 20mph speed limits - encourages walking and cycling

Understanding Walking and Cycling: Summary of Key Findings and Recommendations

In a survey of Portsmouth residents, 40% perceived a safer environment for walking and cycling, 20% responded neutrally, only 25% disagreed following the installation of a 20mph limit on residential roads.

Atkins (2010), *Interim Evaluation of the Implementation of 20mph Speed Limits in Portsmouth – Final Report,* Department for Transport

Sustrans has a campaign Free Range Kids which has two policy asks – introduction of 20 mph in residential areas and more investment in cycling and walking infrastructure- see links below;

http://www.sustrans.org.uk/freerangekids/about-free-range-kids

http://www.sustrans.org.uk/freerangekids/free-range-kids-pledge-form

High vehicle speeds are the greatest deterrent to walking and cycling. In Hilden, Germany, the percentage of in-town trips made by bicycle increased to 23% after the introduction of a 30km/h (18.6 mph) residential limit. Britain's default 30 mph limit is 60% higher than most Northern European towns where far more citizens enjoy the opportunity to walk and cycle in greater safety. UK pedestrians form a greater percentage of road fatalities (22.5%) than any other EU country.

Coventry City Council has recently introduced a 20mph limit within the central city core. This has been achieved without using physical calming and they have gained approval from DfT for 'gateway' treatments that change the perception of motorists when they

enter this area. They have also, as part of this process, introduced shared spaces and removed signals at a major junction. This is the type of intervention that could be seen to work in Birmingham's central city core.

If the Coventry model of gateway treatments is followed then cost to implement an area wide 20mph limit are fairly low, compared to a full implementation of speed tables and other speed reduction measures.

Integration into wider transport policy including demand management

Cycling initiatives must integrate with a wider transport policy that includes demand management of car traffic – this was the single most important finding of Birmingham's participation in the EU BYPAD review of Birmingham's cycling policy right back in 2001, let's not have to re-learn these lessons .

Level of expenditure

It is good practice to set a level for the percentage of local transport spend specifically allocated to cycling, or better still for the annual expenditure on cycling per head of population per annum. Precedents have been set elsewhere e.g. 5% of all transport capital spend in Edinburgh. In practice this is equating to an expenditure on cycling of about £2 per person per annum.

Experience from elsewhere in Europe and from the UK's Cycling Demonstration Towns (CDTs) and Cycling City & Towns (CCTs) programmes suggests that at least £10 per person per annum is required to release the potential of cycling, but we recognise that an incremental change towards this would be more achievable. The average investment in cycling by the CDTs and CCTs was £15 per person per annum. Over the last 10 years London has spent £5 per person per head on cycling. Cities in the Netherlands spend between €3.29 and €26.95 per capita per annum.

In the public consultation on LTP1 back in 2000, readers of the Birmingham Voice (the City Council's own newspaper) were asked how transport spending should be apportioned. On average they said that 8% should be spent specifically on cycling. As far as we are aware, this level has never been attained.

Competition with other UK cities

Bristol was recently rated as the best large UK city for cycling
http://www.futureplc.com/2010/04/06/bike-experts-crown-bristol-%E2%80%9Cuk%E2%80%99s-best-cycling-city%E2%80%9D/
But Manchester has expressed an aspiration to take this title
http://www.thetimes.co.uk/tto/public/cyclesafety/article3437777.ece

At time of writing cycling is the first headline topic on the home page of the Transport for Greater Manchester website, and provides a link to a whole separate TfGM site dedicated exclusively to cycling. http://cycling.tfgm.com/ this is a fantastic website and the offer to cyclists is to be applauded. We understand that the Centro website is under reconstruction, but at this time there is no mention of cycling on their home page.

Birmingham Cycling Strategy 2011

Key commitments include "£1m for cycling facilities over the next four years" and "5000 children trained in BikeAbility Level 1 and 2 by the end of 2012". These are welcome but

more ambitious targets are required in these domains in order to compete with other UK cities. The strategy will now benefit from being complemented by a vision that includes:

- A better defined infrastructure plan for the city as a whole, to ensure that
  - the route network achieves coherence
  - route plans are sufficiently well-defined to ensure that they fully benefit from any opportunities arising from Section 106 or Community Infrastructure Levy
- Better integration of environmental and behavioural interventions at local level i.e. achieving convergence of infrastructure and training around BikeAbility Level 2 – this will be partly through LSTF
- The role of 20 mph limits
- A quantified modal share
- A baseline and a quantified aspiration for level of expenditure in cycling per city resident
- How cycling will continue to be developed after LSTF funding ceases in 2015

Smarter Choices

Sustrans has previously developed and delivered a range of activities to encourage cycling across schools, workplaces and communities as part of our Smarter Choices programme. This aims to create a cycling culture by overcoming the main barriers identified to this and promoting the benefits it can bring. The main challenges which we seek to address through this work are providing access to bikes & related equipment, raising awareness of safe routes, increasing the level of cycling skills and incentivising cycling in order to get people to start and continue doing this.

http://www.sustrans.org.uk/what-we-do/links-to-schools

http://www.sustrans.org.uk/what-we-do/safe-routes-to-schools

In Birmingham, our schools' project (Bike It) has been running since 2008 and has engaged over 40 schools, offering an intensive programme of promotional and educational activities designed to create a long-term cycling culture in schools. The most recent annual report of this project (Bike It – Birmingham: A Summary of Data from 2010/11) is included with this submission along with our national schools' report: 'Transforming Young People's Travel'.
See Appendix One attached.

We are now developing and expanding on the learning from this into other settings, namely workplaces and communities, as part of our involvement in the Bike North Birmingham project. Here we are delivering a package of activities to encourage cycling for a variety of journeys including to and from work, for leisure, recreation, health and overall well-being.

Infrastructure

There is a clear need to map/upgrade existing facilities and develop a coherent network. A systematic approach will ensure that full potential is released and that the importance of addressing some difficult locations is demonstrated:

- Convergence of environment and skills at BikeAbility Level 2

The route network (all roads and cycle paths) can be thought of in terms of the level of BikeAbility skill required to use them. WM LTP3 includes the aim to make all journeys cycleable with Level 2 skill (LTP3 Appendix, p.94 – "In the long term, Level II will be

	sufficient for all journeys, but in the meantime training to Level III skills will enable more people to use the existing highway network"). There are key bottlenecks in some places where Level 3 skill is essential to pass (e.g. Salford Circus for most journeys from Sutton & Erdington to city centre). For each of these it should be possible, in principle, to estimate the number of cycle journeys that could be released with a junction negotiable with level 2 skills. This would also depend on the proportions of people in the affected areas capable of level 2. • <u>A suggested method of assessment</u> 1. On a city map highlight all the barriers to level 2 cycle movement by road – these are motorways, A-roads, railways, canals and rivers. This will divide the city into a series of cells. 2. Identify where the wall of each cell is breached by a level 1 or 2 path or toucan crossing or simple signal controlled crossroads. This will show how level 2 journeys can be made across clusters of cells, but they may not be direct journeys. 3. Highlight on the map some of the major trip attractors: local centres, major employment areas, main education institutions, large leisure venues like football grounds, and railway stations. Just focus on the main local centres at first, including the city centre. 4. It will become apparent that some cells or clusters of cells are cut off from direct access to some or all major trip attractors. 5. Identify where further breaches of cell walls would newly give direct level 2 access from the larger cells or clusters of cells to the main trip generators. **<u>Times' Cities Fit for Cycling Campaign</u>** Birmingham City Council should consider how it can address locally the points raised in the Times' Cities fit for Cycling manifesto, in particular the introduction of city-wide 20,mph speed limits, creation of high quality infrastructure, and appointing a cycling commissioner. **<u>Setting targets</u>** This paper was produced by Sustrans to assist target setting for Bristol and we suggest that this is a similar model that Birmingham should follow as the current cycling strategy does not include any targets**. See Appendix Two attached**
2. How can natural green corridors and walkways alongside road networks be best used to create a city cycle and/or pedestrian network? How has	The Bridgwater Canal in Sale is an excellent example of a canal tow path that is well used for cycle journeys. This is because it fits several essential criteria: • It provides a direct link between places that many people wish to travel to and from. • It is wide enough to accommodate all users without conflict (at current levels of demand) • There are alternative routes at night. The lessons learnt are that if canal towpaths are to be improved for cycling, they should be carefully selected to fit into a wider strategic picture. There is potential for improving towpaths in the Birmingham LSTF corridors so involving CRT in route development is key. Other examples • Rea route – National Cycle Network (NCN) route 5 completed over ten years ago and now very well established as the major cycle commuter corridor from south Birmingham. The cycle counters in Canon Hill Park regularly record over 500 cyclists per day peaking at 100 per day. This route is popular because it is safe, logical, and convenient and has plenty of linkages to surrounding areas. • Cole Valley – NCN route 53 currently under construction with completion set for

this been developed in other cities? What are the barriers to this?	February 2013. A joint project between BCC and Sustrans with Sustrans contributing £350k to the £500k scheme. This project will provide 4.5km of new routes linking Stechford with Solihull's border at Babb's Mill • Harborne walkway – Completed by BCC approx 4 years ago and provides a route between Harborne and just east of the city centre. This route does not fully realise its potential because it does not provide linkage at either end, especially Harborne end where there is no cycle provision. • Recently Warwickshire County Council completed the Rugby Western Relief Road, which has delivered excellent quality cycle facility along the new road. This type of opportunity to provide new cycle routes is invaluable as the provision of cycle facilities at the same time as building new road is very cost effective. It is also important to take these opportunities as trying to retro-fit cycle route is always a compromise. It is also important to consider design very carefully to ensure that such new routes work. Contrast the Rugby project with Selly Oak by-pass and all the constraints and obstructions.
3. What are the resource implications of adapting current cycle routes and joining them up?	Making cycling an easier choice will release various economic benefits, particularly o much greater range and time flexibility for people to reach new jobs, for the large proportion of people without 24/7 use of a car, and o scope to reach their existing jobs for those forced to run a car or second family car when they can barely afford to do so Sustrans has launched a campaign on Transport poverty link attached to raise the issues of Transport Poverty given the concerns that transport is a barrier to employment for many people-see attached link; http://www.sustrans.org.uk/lockedout The joint BCC/Sustrans Connect 2 project in north Birmingham has a total project cost of £2.75 million with £650k coming from Sustrans. This scheme will deliver 14.5km of new route, which works out at just under £190k per km. This funding provides a variety of interventions ranging from major highway works to simply erecting signage on quiet roads to provide links. As a general rule of thumb it is felt that £150k per kilometre is appropriate to deliver new 3m wide bitmac surfaced cycle route off the highway. The report "Increasing Cycling in the City Regions" report by Sustrans for PTEG. http://www.sustrans.org.uk/assets/files/rmu/110411_Cycling_in_the_city_regions_Sustrans_PTEG_report_final.pdf provides comparative costs for adopting the Cycle Demonstration town model across the Centro area. Links across boundaries to Solihull (Cole Valley) and Sandwell (route parallel to canal from Smethwick). The new route in the Cole Valley terminates at Solihull's border but it is important that Solihull continue the development of the project as linkage into their borough is vital. Residents in this location travel around the area and the administrative boundary is not important in their day to day travel. Road space re-allocation is always a challenge as capacity for traffic is consistently the highest priority for engineers. Design of on-highway cycle routes can be compromised by the need to keep the traffic moving at all cost. Re-allocating road space needs a robust stance to be taken by the highway authority and can work as high quality infrastructure that is visible, attractive and safe will increase cycle journeys.

4. Which partners can help us to do this and what resources do we need?

Sustrans Call to Action for 2020

Already two out of five local journeys in the UK are made by foot, bike and public transport. If we made the changes necessary to enable more people to choose smarter travel choices, we'd have clearer roads, cleaner air, and better places and spaces to move through and live in.

That's why Sustrans issued our call to action - **More Haste, Less Speed** - upping the pace to achieve a cost-effective transition to sustainable local travel by 2020. We are calling on national, regional and local governments to act with much more haste to enable us all, whatever our age or ability, to get about more by foot, bike and public transport.

Our call builds on what is happening in **communities** all over the UK, where people are already choosing to make smarter travel choices wherever they can. The call explains the changes - some small, some very significant - that will need to happen to enable us to double the number of local journeys we are able to make sustainably by 2020.

See links to the call to action documents;

http://www.sustrans.org.uk/about-sustrans/call-to-action-for-2020
http://www.sustrans.org.uk/assets/files/policy/Sustrans_MHLS_Evidence_100511.pdf

It is important that Centro develop a robust vision for cycling in the West Midlands, building upon the existing LTP3 and the district cycling strategies. Sustrans has recent experience of developing cycling strategies for Manchester, Bristol and other places and would be able to assist with this process.

Increasing cycling will help Birmingham City Council to make progress with respect to several of the indicators in the Public Health Outcomes Framework, for which the Council will assume responsibility from 1st April 2013. The Council should ensure that cycling features in the Joint Strategic Needs Assessment (JSNA) and apportion a significant percentage of its public health allocation (likely to be about £50m p.a.) to developing cycling. Further resources or support may also be sought from the Clinical Commissioning Groups.
There are also many economic impacts of cycling – please see **Appendix Four** for more detailed analysis of this.

5. Who is currently cycling? Who could be most easily encouraged into cycling? What are the barriers and opportunit

		Cycle at least (%)				95% CI			
Local Authority	**Sample size[4]**	**1 x per month**	**1 x per week**	**3 x per week**	**5 x per week**	**1 x per month**	**1 x per week**	**3 x per week**	**5 x per week**
Birmingham	**593**	*11*	*7*	*3*	*2*	*-2.6 , +3.3*	*-2.0 , +2.7*	*-1.3 , +2.2*	*-1.0 , +1.8*

For comparison

Local Authority	**Sample size**	***1 x per***	***1 x per***	***3 x per***	***5 x per***	***1 x per***	***1 x per***	***3 x per***	***5 x per***

ies to uptake by more people and between more places?

		month	***week***	***week***	***week***	***month***	***week***	***week***	***week***
Newcastle upon Tyne	**503**	*12*	*7*	*3*	*1*	*-3.2 , +4.1*	*-2.4 , +3.5*	*-1.4 , +2.6*	*-0.7 , +1.9*
Manchester	**503**	*13*	*7*	*3*	*2*	*-3.6 , +4.8*	*-2.6 , +3.9*	*-1.6 , +3.0*	*-1.0 , +2.6*
Liverpool	**2,501**	*11*	*7*	*3*	*2*	*-1.4 , +1.6*	*-1.1 , +1.3*	*-0.8 , +1.0*	*-0.6 , +0.8*
Sheffield	**496**	*10*	*6*	*3*	*2*	*-2.9 , +3.9*	*-2.2 , +3.3*	*-1.3 , +2.4*	*-0.9 , +2.1*
Leeds	**504**	*11*	*7*	*3*	*2*	*-3.0 , +3.9*	*-2.3 , +3.3*	*-1.5 , +2.6*	*-0.9 , +2.0*
Nottingham	**537**	*13*	*8*	*3*	*2*	*-3.3 , +4.2*	*-2.5 , +3.5*	*-1.4 , +2.5*	*-1.0 , +2.1*
Bristol, City of	**500**	*24*	*14*	*10*	*9*	*-4.4 , +5.1*	*-3.5 , +4.4*	*-2.9 , +3.9*	*-2.7 , +3.7*

(Note also that there are higher numbers of cyclists among 'professional and managerial' and 'routine and manual' occupations, than among those in 'intermediate' occupations.)

- Source DFT

Sustrans Monitoring unit was commissioned by BCC to produce a report Cycling Trends in Birmingham Report (**Appendix Three)** in order to baseline cycling levels in Birmingham as this information did not exisit. The good news is that cycling is increasing in Birmingham!

Relationship between cycling numbers and cycling casualties

There is much evidence to show that as the numbers of cyclists increase, although there may be an initial brief increase in casualties, the overall casualty rate declines significantly in the longer term:

- London's main roads have seen a 117% increase in cycle use in 8 years, together with a 24% reduction in the absolute number (not just the rate) of cyclists' collisions www.tfl.gov.uk/corporate/media/newscentre/archive/15820.aspx.
- The first 6 "Cycling Towns" in England have achieved an average 27% increase in 3 years, with no significant increase in accidents (NB final data out shortly) http://nds.coi.gov.uk/clientmicrosite/Content/Detail.aspx?ClientId=202&NewsAreaId=2&ReleaseID=408384&SubjectId=36.
- In the Netherlands between 1980 and 2005, there was a 45% increase in cycling, and a 58% reduction in cyclist fatalities. Source: Ministerie van Verkeer en Waterstaat. *Cycling in the Netherlands* 2009, p14 www.fietsberaad.nl/library/repository/bestanden/CyclingintheNetherlands2009.pdf
- In Germany between 1978 and 1995, the proportion of trips made by cycle rose from 7 to 12%, while cyclist fatalities over a similar period (1975-98) fell by 66%. Source: Pucher J and Dijkstra L. *Making walking and cycling safer: lessons from Europe*. In Transportation Quarterly vol. 54 no. 3, pp25-50, 2000 see

	http://policy.rutgers.edu/faculty/pucher/MakingWalkingAndCyclingSafer_TQ2000.pdf • Western Australia increased cycle use by 82% in 7 years during the 1980s, while reducing hospital admissions by 5%. Source: Robinson D. *Safety in numbers in Australia: more walkers and bicyclists, safer walking and bicycling.* Health Promotion Journal of Australia vol.16, pp47-51 www.cycle-helmets.com/hpja_2005_1_robinson.pdf In Copenhagen between 1995 and 2006, cycling increased by 44% and the proportion of people cycling to work has increased from 31% to 36%, meanwhile serious and fatal cyclist injuries fell by 60%. Source: City of Copenhagen Traffic Department. *Copenhagen, city of cyclists: bicycle account 2006.* Copenhagen 2007 www.vejpark2.kk.dk/publikationer/pdf/464_Cykelregnskab_UK.%202006.pdf.

Canals Questions

6. How can we fully exploit canals as transport networks? How has this been done elsewhere and how could we do it in Birmingham as part of a modern transport strategy?	It is important not to exaggerate the role of tow paths in the overall context of developing cycling in the city. This is because: • Tow paths rarely link directly the places people want to cycle between • Urban tow paths are only wide enough to carry small numbers of cyclists safely, and can rarely be widened • Fears for personal security deter many people from using tow paths, especially women • Tow paths are generally unsafe to use after dark and therefore unsuitable for year round commuting • Large numbers of cyclists conflict with use by anglers and some other path users on certain sections There is a limited number of access points to tow paths, taking cyclists out of their way, contributing to fears for personal security and delaying access by emergency services
7. How can we fully exploit canals as economic assets from enterprise and tourism perspectives as well as leisure perspectives?	http://www.sustrans.org.uk/about-sustrans/media/news-releases/new-route-sees-massive-increase-in-everyday-cyclists: 'Bridgewater Way is 39 miles in length and when completed will create a route that will attract over half a million visitors a year, create up to **350 new jobs** and bring over **£6 million into the local economy**.' **Green Alliance 2009 The right route: Improving transport decision-making:** Park Royal London: Surveys on the Grand union Canal were conducted following access and surfacing improvements to the National Cycle Network. Between 2002 and 2004, at the Abbey Road site there was a 321.7% increase in cyclists and 232.4% increase in pedestrians, 49.3% could have used a car but chose not to and 82.0% of trips made on the route are for the purpose of commuting P15 Case study of Grand Union Canal passing through Park

	Royal: 'The large amount of congestion, rat running through the estate, and delays are widely believed to be a major deterrent to further commercial investment in the area. A scheme was proposed to improve six kilometres of the towpath through resurfacing, widening, installing cycle parking, improving ramp access and putting in lighting where feasible. The route, flanked on either side by industrial units, and high-density housing, aimed to provide a safe route for the weekender and a useful, traffic-free route to work for cyclists. The canal path improvements were undertaken in 2003-04 by British Waterways and the London Borough of Brent. The capital cost was £139,130 (2002 prices). Monitoring undertaken by Sustrans after the scheme's completion found a marked increase in use of the canal, especially by adult females cycling to work … [and] a further 50 per cent increase in use of the canal by employees walking and cycling along the canal since the work began.'
8. What are the transport needs of people and businesses on canal routes and what could the network offer them?	See attached report for a general overview Walking and Cycling Infrastructure Evidence of Economic Impacts **Appendix Five**
9. How is the canal network facilitated and limited by existing access between it and other transport networks. How can any limitations be overcome?	CRT best placed to answer
10. How can communities and local businesses/organisations be more involved in looking after canals?	CRT best placed to answer

Compiled by
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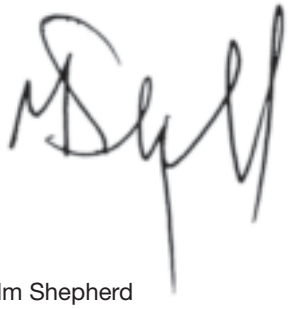
Sustrans October 2012

Transforming young people's travel

Smarter choices for everyday journeys

sustrans
JOIN THE MOVEMENT



Malcolm Shepherd
Chief Executive, Sustrans

Foreword

Success for Sustrans is when people are able to choose to travel in ways that benefit their health and our environment. This means people of all ages and abilities being able to walk, cycle and use public transport for more of the journeys we make every day.

That's why we've concentrated on the travel and play needs of children. If we can create the right space for young people to be out and about by foot and bike, independently and actively, then others will follow.

Enrique Penalosa, a former mayor of Bogota in Columbia and pioneer in the innovative use of public space, put it brilliantly: "Children are a kind of indicator species. If we can build a successful city for children, we will have a successful city for all people."

But you have to start somewhere, and the school journey is a natural beginning. It's usually short and local, perfect for walking and cycling. A huge part of children's lives, it's also a great way of establishing an active travel habit from an early age.

We've been inspired by evidence and examples in Denmark and the Netherlands, where cycling in particular is so ingrained and public space so successfully created around their needs, that Dutch children make over a third of their trips by bike[1].

Sadly, whilst our children have Dutch-style aspirations, with nearly half wanting to cycle to school[2], only 1-2% achieve this UK-wide[3]. Turning this desire into reality is clearly the right thing to do, and has so many benefits:

- **increased physical activity**, tackling our chronic obesity problem and even helping improve academic results
- **a cleaner environment**, lowering both local air and noise pollution, and helping us achieve our carbon targets
- **reduced congestion** that improves the reliability of our road network.

We're thrilled that, with our partners and the children themselves, we are able to transform the lives of young people all over the UK. This success comes from building skills and confidence, in children and parents, combined with delivering safe walking and cycling routes, and developing community consensus to reduce traffic speeds and volume.

As you will see in this report, the more we put into our efforts to get children out of the back seat and onto their feet or two wheels, the more they – and we – will get back.

27%
the number of children regularly cycling to school where there is a Sustrans officer working[2]

65%
the increase in walking when working with rural schools in Northern Ireland[4]

890,000
bike and scooter journeys to school in the Big Pedal 2012, the UK's biggest school cycling competition[5]

How do we increase levels of walking and cycling by children?

- we work with children in schools to give them the skills and confidence to travel under their own steam, and their parents and teachers the peace of mind to let them
- we create a pro-cycling and walking culture in the school community, inspiring children and their parents to get involved and generating positive publicity, with far-reaching benefits beyond the school gate
- we create networks of walking and cycling routes around schools to create safe routes for children, and others, to get about more by foot and bike.

Around schools:

Wherever possible we also work with our partners to make the streets around schools safer for children by improving crossings or building new walking and cycling routes linking schools to their community and the National Cycle Network.

We focus on:

- auditing existing walking and cycling provision in and around schools
- conducting walking and cycling feasibility studies
- design and delivery of improvements to crossings and access points around schools, and reducing traffic speed
- design and delivery of walking and cycling routes to schools
- installing cycle and scooter storage.

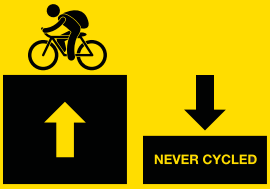
In schools:

Our officers deliver a planned programme of activities to increase walking and cycling and create a supportive environment.

They do this by:

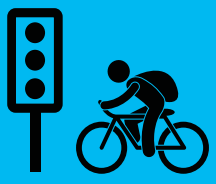
- working with the school management team to gain their full support for the programme
- using every opportunity possible to explain the benefits of cycling and walking to the children, their parents and teachers
- addressing parental and school concerns about the safety of children getting around on foot and by bike, with the help of the local authority and other partners
- organising practical activities that help give people confidence to walk and cycle more, including group cycle rides and walks, cycle training and bike maintenance
- linking cycling and walking to the school curriculum
- providing training opportunities for teachers and parents, enabling them to start leading activities themselves
- organising local events, generating positive publicity and motivating children, parents, staff and community members to join in
- arranging UK-wide mass-participation events, such as the Big Pedal
- providing ongoing support of schools as they progress through the Sustrans School Mark, our scheme to recognise and encourage long-term commitment to cycling and walking.

The evidence shows that creating safe routes to and around schools, combined with a focus in school on walking and cycling, achieves the greatest success.



36%

the reduction in the number of pupils who never cycle to school in Belfast schools where we worked[6]



70%

of parents think that their child is competent enough to cycle to school on-road, double the number before our engagement[7]

91,372,234

estimated trips on Sustrans' National Cycle Network made by children during 2011[8]

Benefits to children

48% of children want to cycle to school[2], but nationally only 2% do[3]. Whilst 47% of children aged five to 10 walk to school[3], this is 11% fewer than in 1995[3], and the number being driven the average 1.5 miles to primary school[3] is increasing each year.

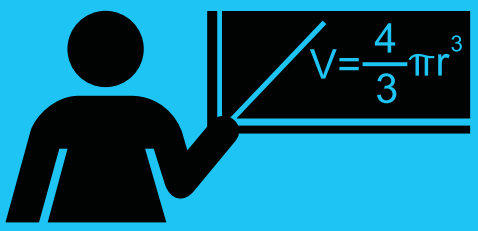
Where we work to increase walking and cycling the impact is dramatic:

- 27% of pupils cycling regularly to school, up from 15%[2]
- double the levels of everyday cycling, from 4% to 8%[2]
- reduction in children who never cycle to school from 72% to 52%[2]
- work with schools in rural areas of Northern Ireland resulted in an average increase in walking from 20% to 33%[4]
- completion of a typical safe route to school in Watton, Norfolk, lead to a fivefold increase in the number of children walking to school[9].

52% of parents report their child is more active and a third feel their child is generally healthier[11]

walking and cycling increases the total amount of time children spend being active each day[12]

pupils who don't normally enjoy sport benefit: "cycling has got the pupils that aren't natural team players involved in exercise"[13]



a recent review of **14 studies** concluded that 'participation in physical activity is positively related to academic performance'[14]

children report feeling more alert when they get to school, and more able to concentrate in class[15]

This change has many benefits...

more active parents: 53% cycle more **23%** walk more[7]

quality family time: "we used to go on not many bike rides but we go on loads now - it's good having more time with your family". "it helps get the family out the house instead of them just sitting watching TV"[10]

"because we've done more, we've done right hand signals… I used to be scared when you take your hand off to signal, in case I fell off, but I'm not anymore"[16]

walking and cycling to school encourages children to be "active and also responsible", providing "a good sense of freedom and independence" and building "self-confidence"[17]

More girls cycling, more often

Fewer girls cycle to school than boys, especially in secondary school, and evidence shows that girls are less physically active as they get older. Our focus on girls at schools in Perth and Edinburgh saw daily cycling to school amongst girls increase from **1% to 5%**[18]. And regular cycling outside of school, amongst older girls in particular, increased dramatically, from **17% to 58%**[18].

Our approach included three days of fun activities where girls discussed their issues and barriers to cycling, explored natural beauty and fitness, and the role cycling can play in looking and feeling great whilst being a really easy way to get around.

The course also focused on cycling skills and basic bike maintenance, and rides on cycle paths to increase familiarity with the local area, enthusing the girls involved: **"I'd never cycled before and now I do it all the time**. It was fab!". "The whole project has encouraged me to cycle more. It was such a good idea and it was so much fun."

Children inspired... and inspiring

At just seven years-old Fraser was presented with a trophy for completing **1,000 miles** by bike to school, after being inspired by our work. Now eight, **he has cycled to school every day since he was five**, with dad Steve and younger brother Matthew.

His enthusiasm is boundless "…cycling in the fresh air is healthy and helps save the earth… it also helps with my fitness for football, swimming and gymnastics." Steve agrees. "I tell him cycling is cheaper, Fraser comes home from school and tells me about the benefits of cycling, how it's good for your health and the environment."

After dropping Fraser off, Steve continues with Matthew to pre-school, but doesn't stop there. "We always cycle at weekends – we recently did a lovely ride from Exmouth to Budleigh Salterton on the disused railway path. I do the shopping by bike and put it in my panniers, it is easier and cheaper as **you don't need to find a car park or get stuck in traffic…**"

8%

the average number of pupils cycling every day after a year of Sustrans' work, four times the national average[2]

The benefit to schools

At peak times in the morning and afternoon, the areas around schools become very congested with cars – 43% of journeys to primary school are made by car[3], despite being around a 20-minute walk on average.

General growth in traffic, with the expansion and building of new schools to cater for our growing population, will increase car use on the school run. A concerted effort by schools to encourage walking and cycling can break this spiral.

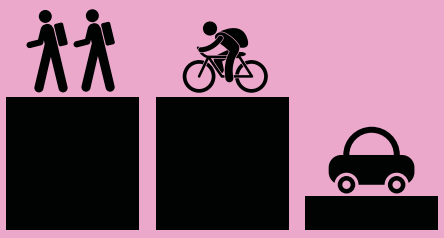
Our work significantly reduces dependence on cars, creating a safer, more pleasant environment around the school, with more active pupils and engaged parents:

- in Northern Ireland, where we combined the development of safe routes with increasing walking and cycling, car use reduced from 64% to 49%[4]
- parents and teachers say that children arrive "more alert and ready for action."[13]

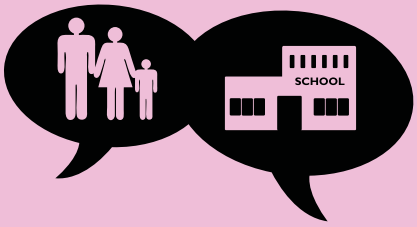
cross-curriculum learning: "The way in which cycling has been incorporated into cross-curricular activities is amazing. We've had art work, science lessons, eco work, carbon footprint education and even bike poetry sessions during book week!"[13]

supporting and motivating: alongside training of staff and parents, Sustrans' School Mark scheme fosters and rewards a long-term culture of walking and cycling

environmentally-aware children: cycling and walking are seen as "helping you get fit and they're both better ways to come to school because of cars polluting the earth"[10]

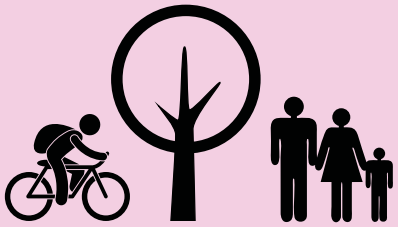


at Crossflatts Primary School in Bradford we've worked over several years to create safe routes around the school and increase cycling and walking. Half of the children consulted were initially driven to school, but now walk, cycle or scoot, and **70% of pupils now travel actively every day**[15]



school staff widely report that family members formerly not seen in school get involved in running activities to encourage walking and cycling

in addition to the children we directly engage, **11% of their adult family members** and **27% of their siblings** get involved[11]



in Conwy, Wales, the number of pupils being driven to schools every day was reduced from **37% to 27%**, whilst everyday cycling climbed from just **2% to over 10%**[19]

Joan Aldridge, principal at St Mary's Primary School, Derrytrasna, saw car use reduced: "Parents are now happy to allow their child to walk or cycle home from school as the school area is now perceived as a safer place."

Cycling in the curriculum

Chris Donovan, headteacher of St Anne's Primary School in Surrey, is delighted with progress in his school:

"When we started, **only 1% of children cycled** regularly and we had no cycle storage, **now 23%** do and we have sufficient storage for 40 bikes, with our two sheds regularly full. St Anne's is close to some busy roads and… we have a wide catchment area. What I find particularly pleasing is that working with Sustrans has helped overcome these barriers to raise cycling levels to the high ones we have now.

"Cycling is now included in our 'learning journey' curriculum and we offer bike skills activities as part of PE lessons in a number of year groups. Cycling is becoming an embedded part of our school culture.

"As we have progressed, we have taken increasing responsibility for our own development, so that the work we do is now sustainable. Working towards the **Sustrans School Mark awards** has helped shape what we have done and given useful pointers of new things we could try and we are now working hard to achieve the Gold Award."

Academic achievement

At Kesgrave High School in Suffolk over half of their 1800 pupils cycle to school. Graded "Outstanding" by Ofsted, the deputy head, Brian Hawkins, sees a link between pupils being active on the school journey and attention levels in the classroom.

"… It is always difficult to categorically state that cycling improves performance but the school has a very high number of cyclists and walkers and is very successful in terms of examination outcomes across the board. **Pupils who cycle to school certainly arrive awake and ready to fully function throughout the day.**"

95%

teachers who say that pupils we work with are more physically active[20]

The benefit beyond the school gate

Schools are often at the heart of communities, and the school run can be an unpleasant experience for local residents. And with nearly a quarter of cars on the road at 8.35am taking children to school[3] (with 72% of these returning straight home again[3]), the impact on traffic flow is enormous.

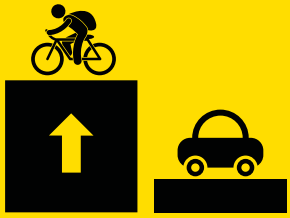
Between 1990 and 2006, emissions from school travel increased by 59%[21], the largest percentage increase within the overall carbon footprint for schools. This has implications for local pollution and carbon targets.

Increasing levels of walking and cycling to school means less congested roads, improved journey time and predictability for other car users, and a reduction in CO_2 emissions, pollution and noise.

active for life: in a recent survey of adults who cycle regularly, **96%** learned to ride a bike as a child, with **nine out of 10** able to ride a bike by the age of eight[22]

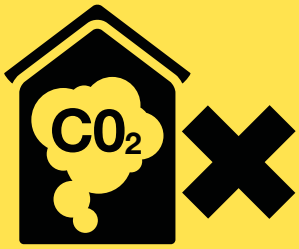
community cohesion: "One of the remarkable findings… is the way that cycling and walking can be used as a tool to bring communities together, helping them develop a sense of shared identity"[15]

inspiring others: in our survey of partners **89%** said we'd helped to establish local examples of good practice, and **77%** that we'd inspired other schools to take action with regards to school travel[23]



where we work in schools to increase cycling, car use on the school run reduces by an average of **11% over a year**[2]

an assessment of our work – where we expect to achieve an average reduction in pupils being driven every day of 11% in 165 schools, there is an estimated value of over **£3.3 million** in reduced congestion in just three years[24]



transport generates 16% of the school sector's total carbon emissions[21]. Short car trips, like the school run, are the most polluting and inefficient

parents who report driving less often since their child was engaged in cycling or walking to school are making an average of five fewer trips by car per week[7]

in Blyth, following improved walking and cycling access to schools, journeys by foot or bike by people **over the age of 65** nearly doubled, with older women making seven times more trips by bike than before. Commuting on these routes now accounts for over one in five journeys, compared to less than one in 20 previously[25]

Access for all

Our programme to extend the National Cycle Network into communities UK-wide is benefitting many schools. **New networks and crossings of busy roads and railways have been bringing together communities**, providing traffic-free walking and cycling routes.

Adam Croft, headteacher at Charles Darwin Community Primary School in Northwich, told us about the difference a new bridge has made in accessing a local pool for swimming lessons. Whilst only a few hundred metres away, it is across a river so the school had to hire a bus – partly paid for by parents and carers.

"The opening of the Riversdale Bridge has had a huge impact… Now that we are able to walk the short distance safely we are obviously saving on the bus expense, **the children get some fresh air and exercise on the journey** and I can be far more flexible with regards to which children I take as there is zero cost to parents.

"I am also aware that the opening of the bridge has proven extremely beneficial to those families who live in Kingsmead on the opposite bank and attend my school."

Connecting communities

Another success is the Padiham Greenway, a former disused railway line in Lancashire. With the help of the community and local authority, we converted it to a safe walking and cycling route to connect children to their school, and the wider community to each other.

Evaluation of the impact reveals a strong sense of community pride in the development of the Greenway, and in Padiham as a place to live. Parents say that the communities either side of what was previously a physical barrier have been drawn closer together. **As a result of the Greenway, they say Padiham has generally improved as a place to live**, creating not just an invaluable link but a more attractive environment to live in.

4:1 £ £

benefit to cost ratio of walking and cycling routes to schools developed by Sustrans[26]

Working together...

We work in a variety of settings with a wide range of people, and are able to draw on a wealth of experience that ensures people are able to choose healthier, cleaner and cheaper journeys. Our flexibility means we can provide different solutions for different partners.

For example, North Tyneside Council and the North of Tyne NHS asked us to develop an initiative to increase the number of pupils cycling and walking to school specifically to increase overall levels of physical activity among pupils and their parents.

For the 12-week pilot we drew on our experience UK-wide to develop a range of activities to engage Year Five pupils in walking and cycling. We then compared the results with a control school of similar size and location where baseline surveys showed a similar travel pattern for school journeys.

Overall, whereas at the control school there was a slight decrease in the percentage of children travelling actively to school, at the school where we worked there was a clear increase in levels of active travel.

The level of reported physical activity in these children more than doubled from an average of eight periods of physical activity per pupil per week to 19 periods[17].

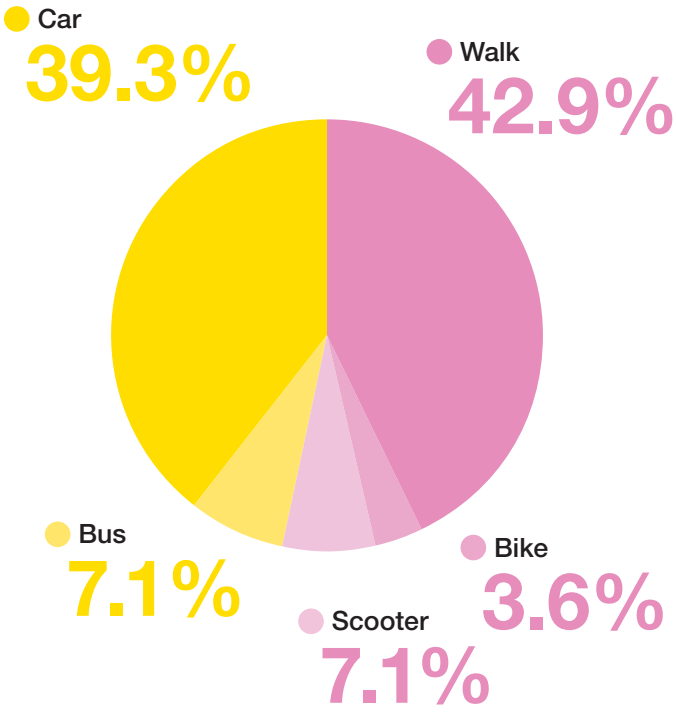
Several parents also noted a positive change in their travel behaviour. One parent, who now walks and cycles more and drives less, said:

> "All physical exercise should be encouraged and made a part of everyday life to reduce obesity"[17]

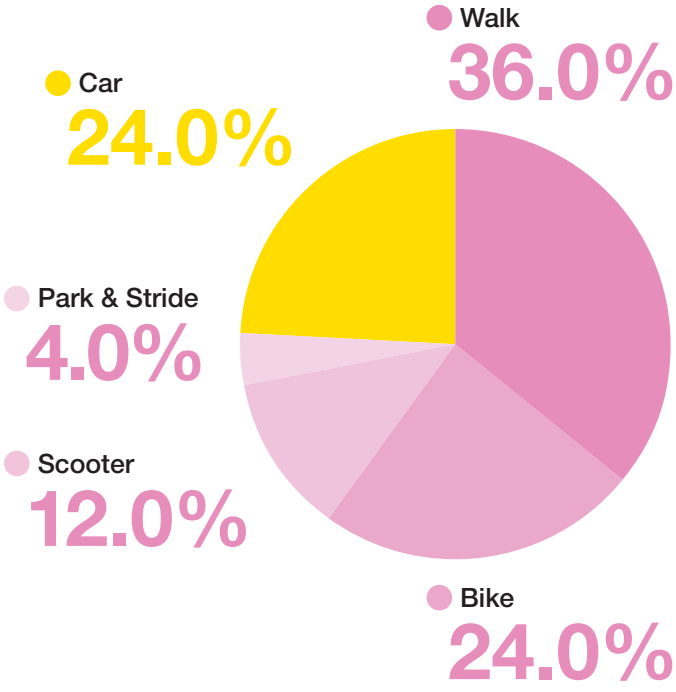
Qualitative research reveals wider benefits, with pupils and parents reporting an increased sense of wellbeing, freedom and independence. In addition, school staff observed a sense of pride and ownership amongst participating pupils, in the project and in their active travel choices.

The pilot has resulted in a wider roll-out, and we are now working to increase levels of physical activity in a range of schools in Tyne and Wear.

Travel behaviour **before** Sustrans



Travel behaviour **after** Sustrans



We have been transforming young people's travel since Sustrans began in 1977 and our aim is to benefit many more every year. Can we help you make a difference?

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Get in touch

We hope that this report has demonstrated the enormous potential for increasing walking and cycling amongst young people, and the benefits of this in raising levels of physical activity and tackling congestion.

If you'd like to work with us or discuss how we can best achieve what you need, then please get in touch via our dedicated email address **youngpeople@sustrans.org.uk**, or for more information visit **www.sustrans.org.uk**

Our central schools and young people team is based at our head office in Bristol but you can also discuss your requirements with any of our offices UK-wide:

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About Sustrans

Sustrans makes smarter travel choices possible, desirable and inevitable. We're a leading UK charity enabling people to travel by foot, bike or public transport for more of the journeys we make every day.

We work with families, communities, policy-makers and partner organisations so that people are able to choose healthier, cleaner and cheaper journeys, with better places and spaces to move through and live in.

It's time we all began making smarter travel choices

sustrans
JOIN THE MOVEMENT

Bike It - Birmingham

A summary of data from 2010-2011

December 2011

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It's time we all began making smarter travel choices. Make your move and support Sustrans today. www.sustrans.org.uk

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Executive Summary

This document summarises data available for the Bike It project in Birmingham, covering hands-up data collected for four schools that started engagement during 2010-2011. An outline of activity data and bike counts collected during 2010-2011 is also provided for all schools engaged in the project.

Hands-Up Survey 2010-2011

- Results for schools in Birmingham engaged in their first year of Bike It in 2010-2011 show that the project has had a positive impact on pupils' cycling levels. The percentage of pupils cycling to school every day more than doubled from 2.0% before Bike It to 5.1% after one year of engagement in the project
- Furthermore, the percentage of pupils regularly[1] cycling to school increased by 13.7 percentage points (from only 8.0% of pupils before Bike It to 21.7% of pupils after) and the percentage of pupils who never cycle to school decreased by 27.1 percentage points (from 80.8% of pupils before Bike It to 53.7% after engagement in the project), indicating that almost half of all pupils cycled to school at least once or twice throughout the year
- As one would hope from this increase in cycling, there was also a decrease in the percentage of pupils travelling to school by car every day (dropping by 3.4 percentage points from 27.3% prior to Bike It to 23.9% after one year of engagement in the project). This indicates that there has been a positive shift from sedentary modes of travel to school to active travel
- The shift from sedentary modes of transport to active travel is even more impressive given that hands-up results show that there has also been an increase in levels of walking to school. The percentage of pupils who said that they regularly walk to school increased by 8.2 percentage points from 64.6% before Bike It to 72.8% in the post survey
- Bike It has been successful in increasing levels of cycling to school over one year of engagement and results from the hands-up survey show there is great potential for this to continue in future years. In the 2010-2011 pre survey 53.4% of pupils in Birmingham told us that cycling would be their preferred mode of school transport, and 90.9% of pupils in the post survey said they have access to a bicycle.

Activities 2010-2011

- In the last academic year (2010-2011) the Bike It Officer in Birmingham delivered 194[2] activities across all Bike It schools
- In total, throughout 2010-2011 the Bike It Officer in Birmingham has delivered 5,443[3] positive cycling experiences to pupils, their parents and teachers
- Activities with the highest pupil participation included: bike to school events, bike rides and Dr Bike maintenance sessions.

Bike Counts 2010-2011

Bike It Officers keep a record of how many bikes are on site each time they visit a school. Schools are also encouraged to keep a record of bike counts throughout the year.

Based on the percentage of each school roll, the schools with the highest recorded bike counts included: St. Francis C of E Primary (47.7%); Colmore Junior School (31.9%); and Moseley C of E Primary (28.9%).

[1] Once a week or more
[2] Excluding assemblies and hands-up surveys
[3] I.e. the events held by the Bike It Officer were attended by 5,443 people in total. It is important to note that this figure may include repeat participants, and does not necessarily equate 5,443 different people.

1.1 Summary of data for Bike It Schools in Birmingham

1.1.1 Hands-Up data – Birmingham 2010-2011

This section summarises hands-up data collected in four of the six schools that became engaged with Bike It in Birmingham during 2010-2011. Pre surveys were conducted between September and November 2010 prior to engagement with Bike It. Post surveys were carried out at the end of the school year in July 2011.

Table 1-1 List of Schools

School Name	
Allens Croft Primary	Leigh Junior Infant and Nursery
Colmore Junior	Town Junior School

Table 1-2 Do you cycle to school? (2010-2011)

	Pre		Post	
	Frequency	%	Frequency	%
Every day	19	2.0	47	5.1
Once or twice a week	58	6.0	154	16.6
Once or twice each term	55	5.7	146	15.8
Once or twice a year	52	5.4	81	8.8
Never	776	80.8	497	53.7
Total	960	100.0	925	100.0
	Pupils cycling regularly			
	Pre		Post	
	Frequency	%	Frequency	%
Regular cycling*	77	8.0	201	21.7

*once or twice a week or more

Chart 1-1 Do you cycle to school? (2010-2011)

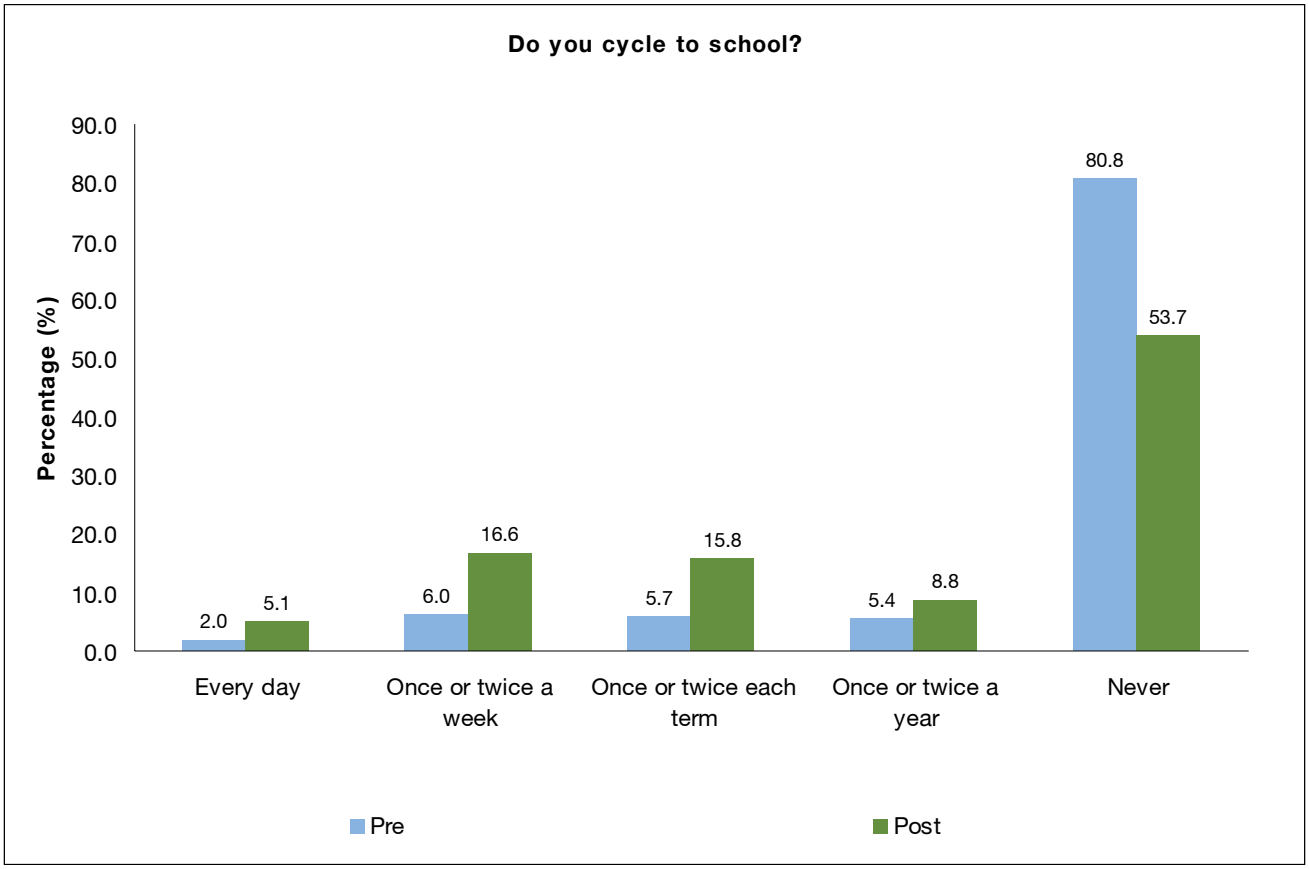


Table 1-3 Do you walk to school? (2010-2011)

	Pre		Post	
	Frequency	%	Frequency	%
Every day	457	47.8	441	49.9
Once or twice a week	161	16.8	202	22.9
Once or twice each term	53	5.5	52	5.9
Once or twice a year	31	3.2	41	4.6
Never	254	26.6	147	16.6
Total	956	100.0	883	100.0
	Pupils walking regularly			
	Pre		Post	
	Frequency	%	Frequency	%
Regular walking*	618	64.6	643	72.8

*once or twice a week or more

Chart 1-2 Do you walk to school? (2010-2011)

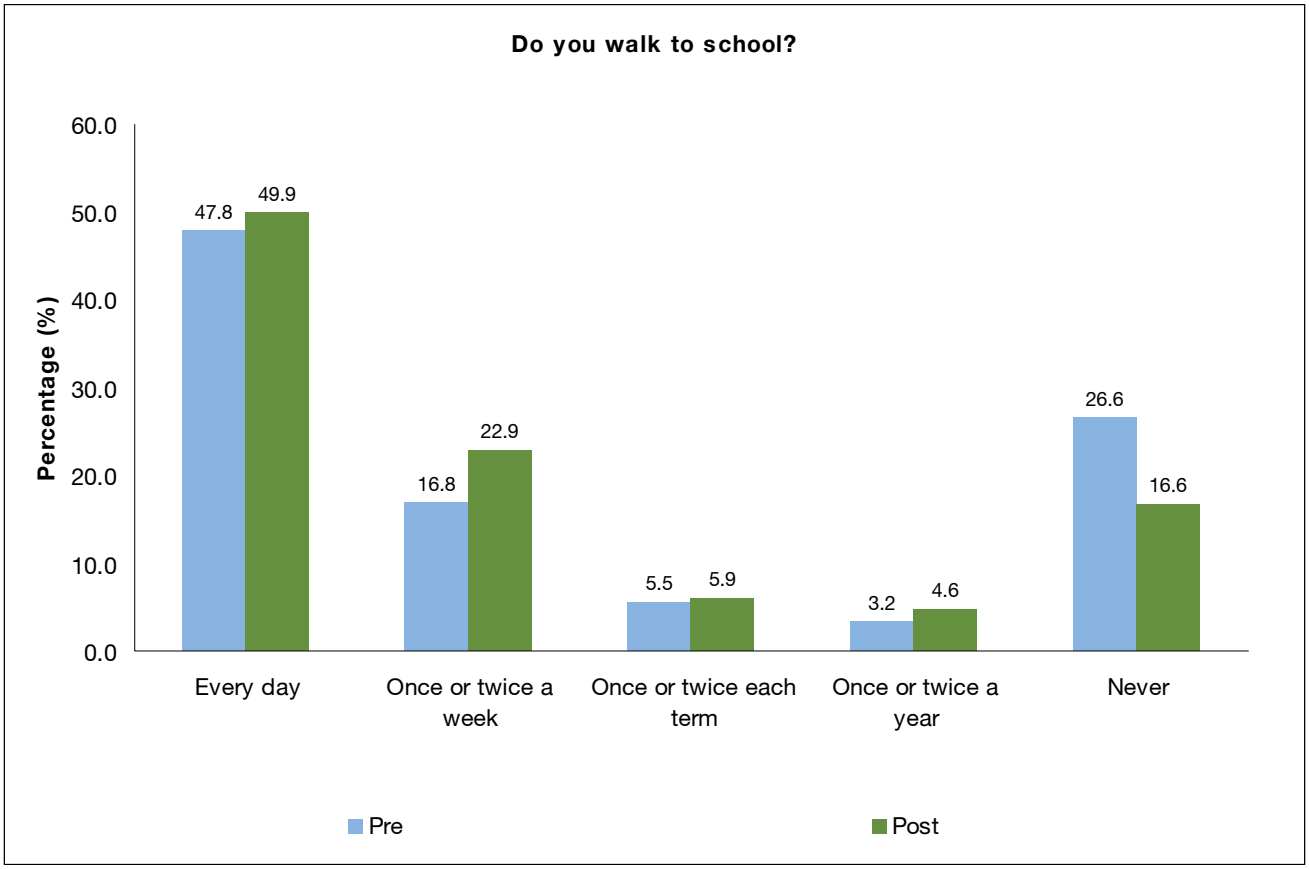


Table 1-4 Do you come to school by car? (2010-2011)

	Pre		Post	
	Frequency	%	Frequency	%
Every day	265	27.3	214	23.9
Once or twice a week	182	18.8	203	22.7
Once or twice each term	55	5.7	45	5.0
Once or twice a year	30	3.1	49	5.5
Never	437	45.1	384	42.9
Total	969	100.0	895	100.0
	Pupils being driven regularly			
	Pre		Post	
	Frequency	%	Frequency	%
Regularly being driven*	447	46.1	417	46.6

*once or twice a week or more

Chart 1-3 Do you come to school by car? (2010-2011)

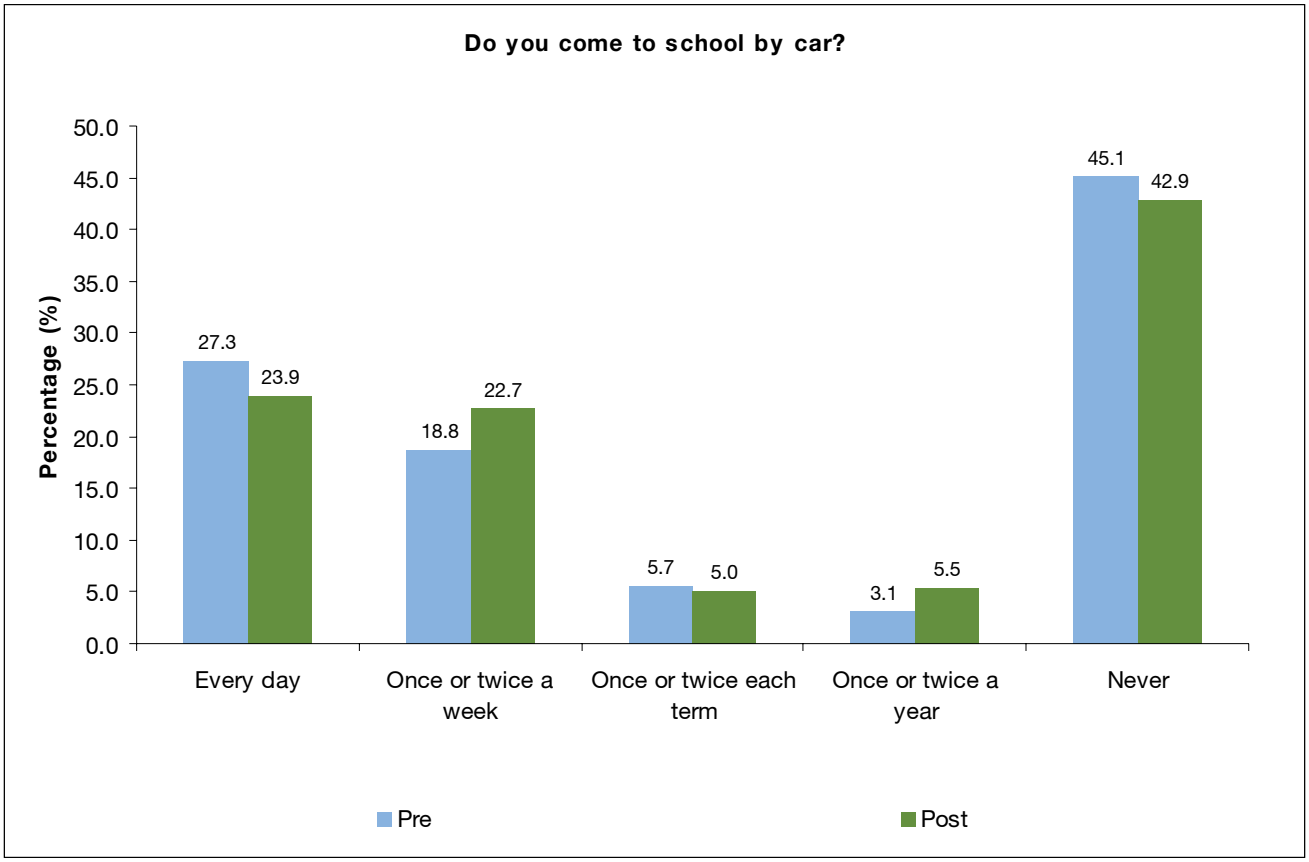


Table 1-5 How did you travel to school today? (2010-2011)

	Pre		Post	
	Frequency	%	Frequency	%
Car	373	39.0	336	37.6
Walk	526	55.0	469	52.5
Bus	25	2.6	14	1.6
Cycle	25	2.6	59	6.6
Scooter	4	0.4	16	1.8
Train/other	3	0.3	0	0.0
Total	956	100.0	894	100.0

Chart 1-4 How did you travel to school today? (2010-2011)

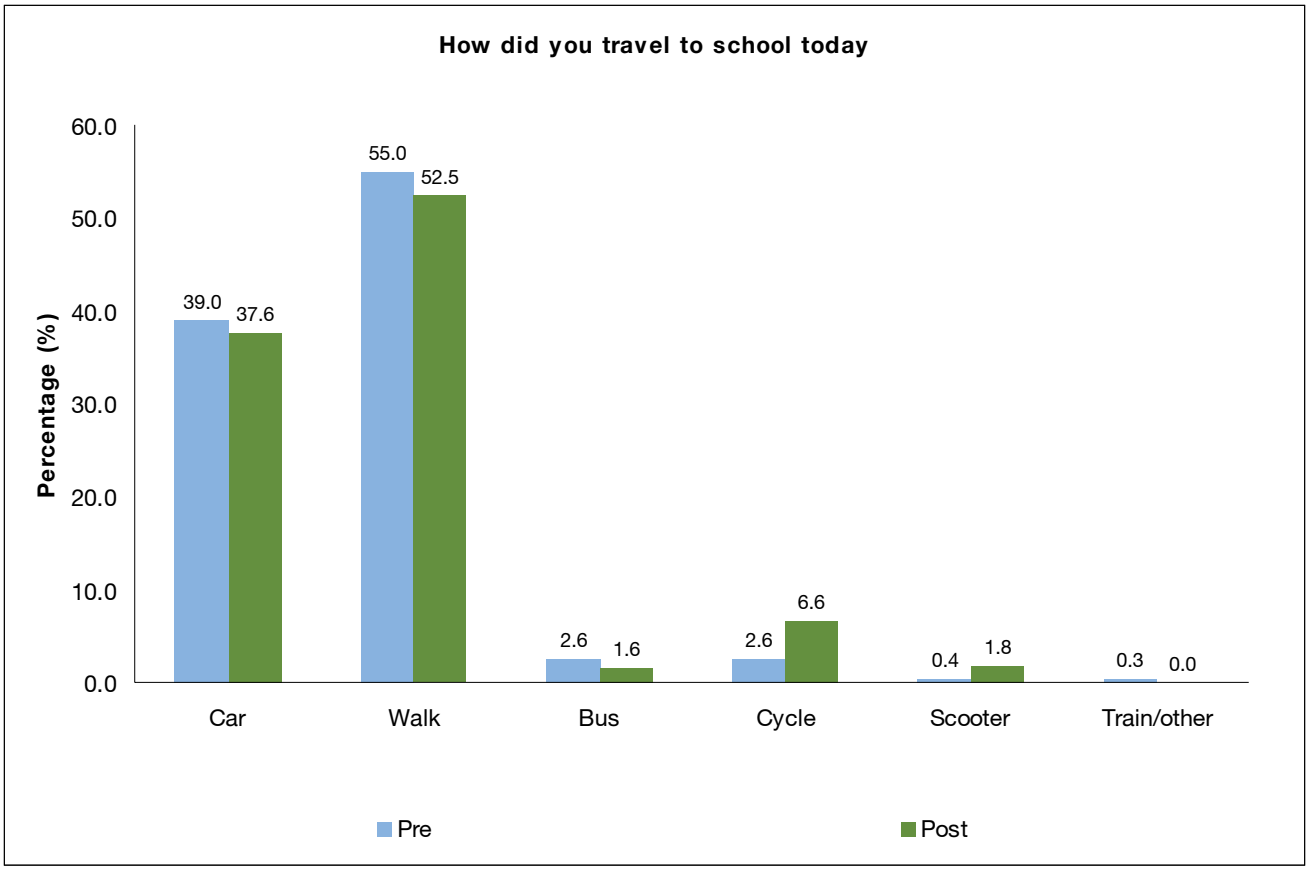
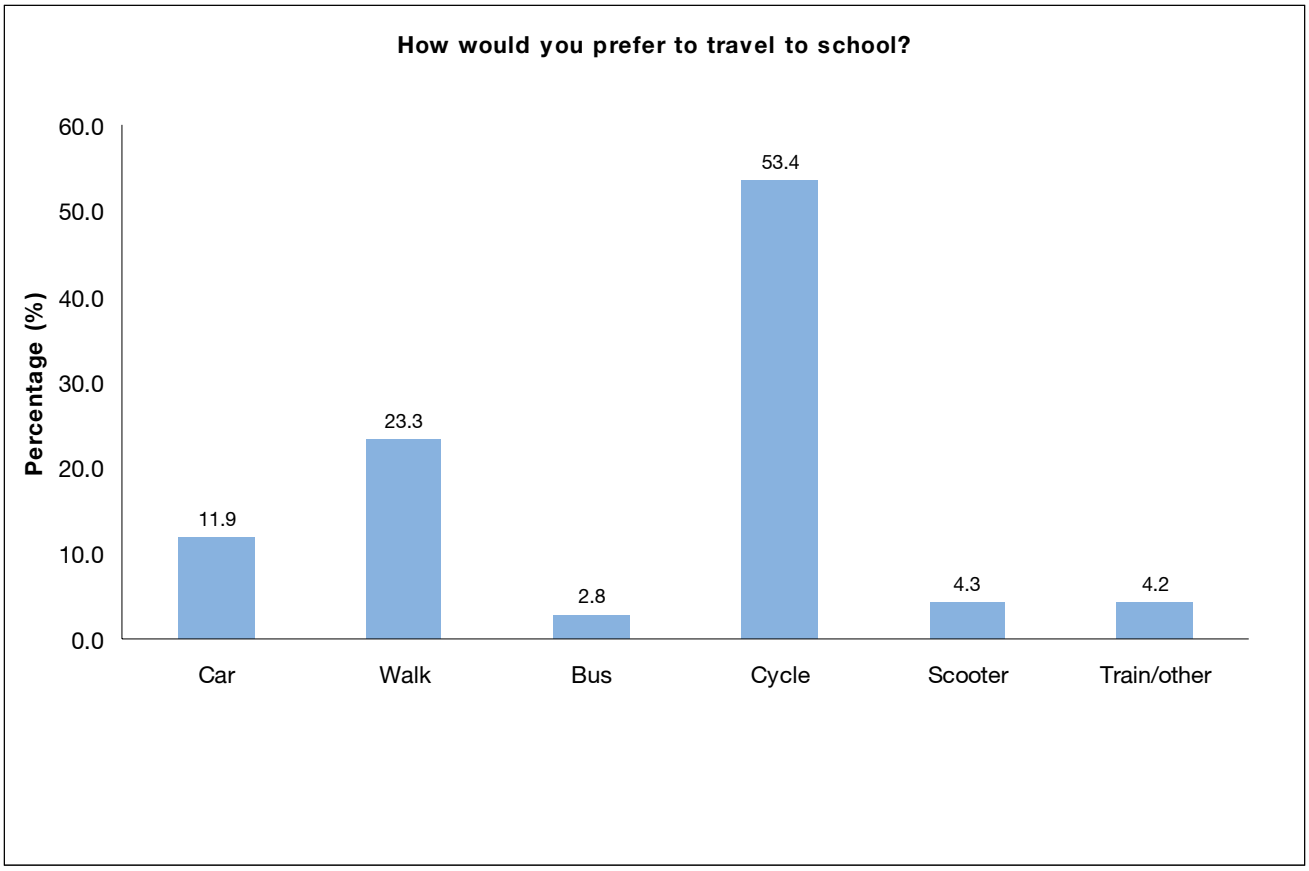


Table 1-6 How would you prefer to travel to school? (2010-2011)

	Pre[4]	
	Frequency	%
Car	116	11.9
Walk	227	23.3
Bus	27	2.8
Cycle	520	53.4
Scooter	42	4.3
Train/other	41	4.2
Total	973	100.0

Chart 1-5 How would you prefer to travel to school? (2010-2011)



[4] This question is asked in the pre survey only

Table 1-7 How often do you ride your bike outside of school? (2010-2011)

	Pre		Post	
	Frequency	%	Frequency	%
Every day	202	21.0	239	26.4
Once or twice a week	384	40.0	387	42.8
Once or twice a year	135	14.0	86	9.5
Never	240	25.0	192	21.2
Total	961	100.0	904	100.0
	Pupils regularly cycling outside of school			
	Pre		Post	
Regularly cycling outside of school*	Frequency	%	Frequency	%
	586	61.0	626	69.2

*once or twice a week or more

Chart 1-6 How often do you ride your bike outside of school? (2010-2011)

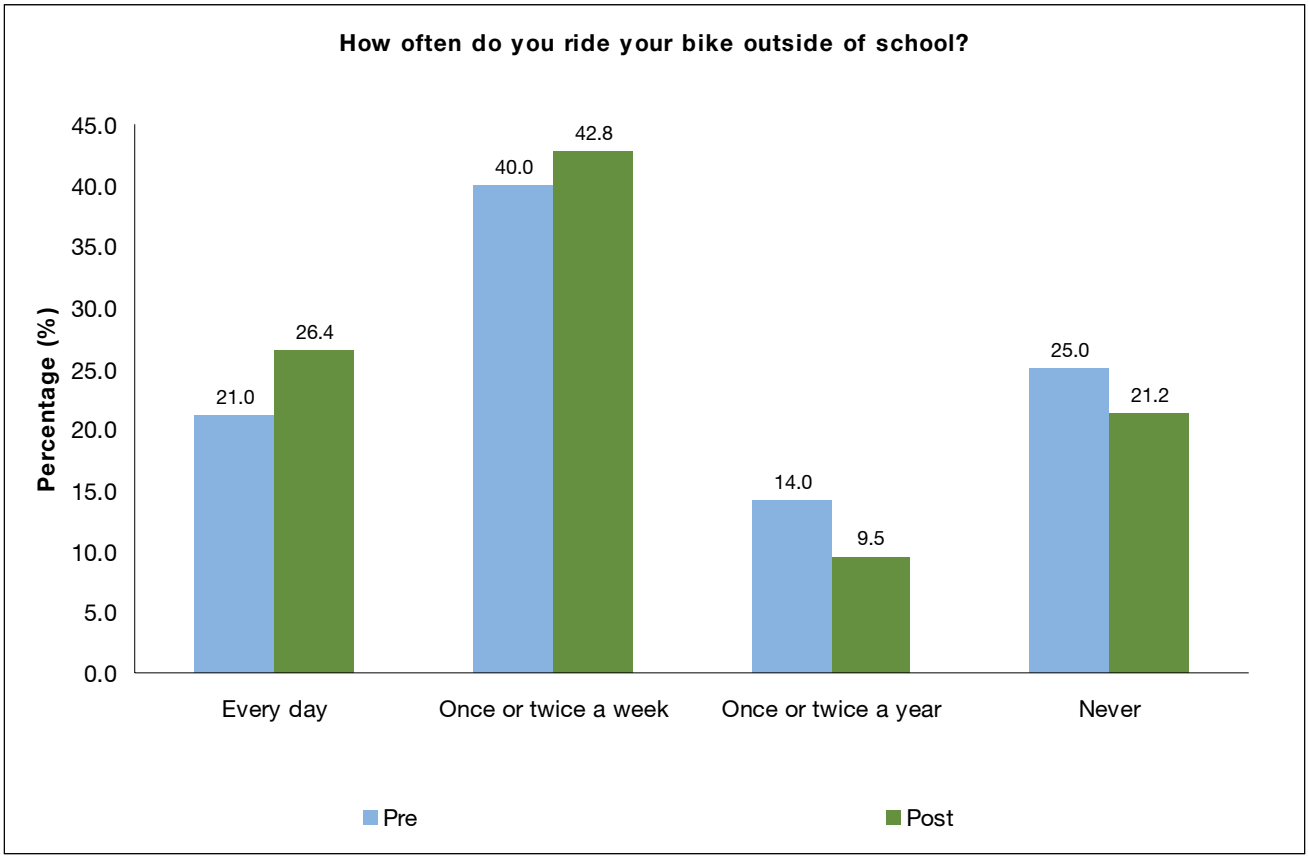
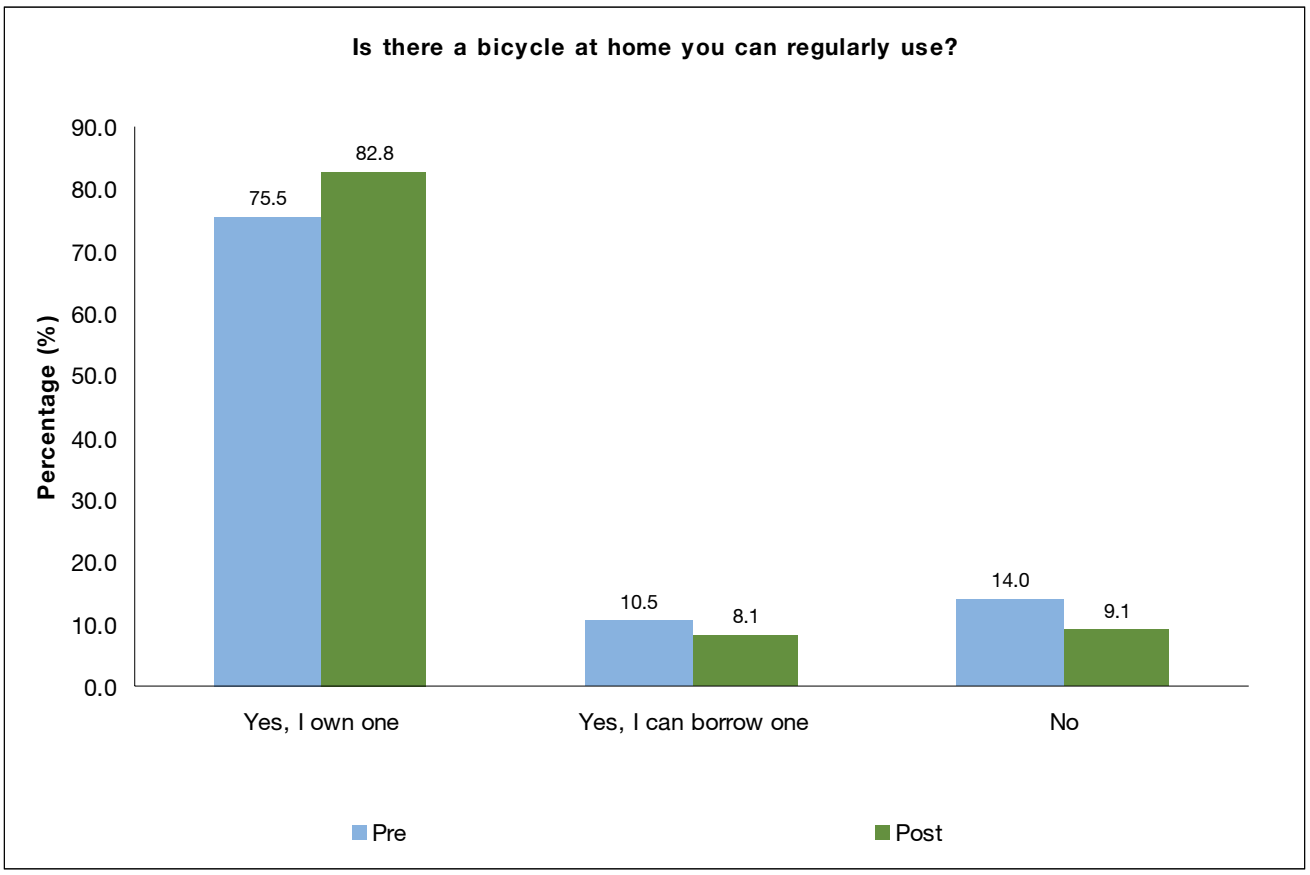


Table 1-8 Is there a bicycle at home you can regularly use? (2010-2011)

	Pre		Post	
	Frequency	%	Frequency	%
Yes, I own one	724	75.5	738	82.8
Yes, I can borrow one	101	10.5	72	8.1
No	134	14.0	81	9.1
Total	959	100.0	891	100.0

Chart 1-7 Is there a bicycle at home you can regularly use? (2010-2011)



1.1.2 Activity Log - Birmingham 2010-2011

This section summarises the activity log data collected in Birmingham Bike It schools. These activities were carried out during the 2010-2011 academic year.

Table 1-9 Activity Log

Activity	No. of activities	Pupils	Staff	Parents	Total attendees
After School Club	7	35	3	0	38
Bike Breakfast	1	43	1	36	80
Bike Crew/BUG Meeting	10	140	11	72	223
Bike It Champion Meeting	23	0	34	1	35
Bike Maintenance Session	7	64	7	11	82
Bike Ride	14	248	25	166	439
Bike Shed Opening	2	164	4	33	201
Bike Sports Day/Event	1	26	4	0	30
Bike to School Event	11	1,017	68	17	1,102
Bikeability Training	18	59	20	3	82
Bling/Decorate Your Bike	10	181	18	8	207
Classroom Session	14	845	42	1	888
Classroom Skills Session	1	49	4	0	53
Dr Bike Session	16	598	20	26	644
Equipment Sale	4	131	44	114	289
Funders Meeting	1	0	0	0	0
Go-Ride Training	6	176	6	1	183
Other Meeting	7	25	72	10	107
Parents Meeting	5	48	7	67	122
Playground Skills Session	10	202	5	2	209
Puncture Repair Session	1	6	1	0	7
School Travel Plan Meeting	2	0	5	0	5
Stabiliser Free Session	9	125	9	0	134

Table 1-9 Activity Log (continued)

Activity	No. of activities	Pupils	Staff	Parents	Total attendees
Staff Meeting	10	0	169	0	169
Sustaining at distance schools	2	15	0	2	17
Virtual Bike Race Event	1	83	5	8	96
Volunteer Meeting	1	0	1	0	1
Total	194	4,280	585	578	5,443

1.1.3 Bike Counts – Birmingham 2010-2011

Below is the highest bike count recorded at each school during the 2010-2011 academic year.

Table 1-10 Bike Counts

School	Activity	Headline bike count	% of school roll
Allens Croft Primary	None	26	12.4
Colmore Junior	Bike Breakfast	115	31.9
Cottesbrooke Junior School	None	36	11.0
Gilbertstone Primary	Bike to School event	46	10.2
Hollywood Primary	Bling/Decorate your Bike	23	6.2
Kings Heath Primary	None	57	7.9
Kings Norton Boys	None	18	2.9
Moseley C of E Primary	Bike Sports day/Event	61	28.9
Park HIll Primary	None	27	5.8
Perry Beeches Junior	Bike to School event	84	24.9
Perry Common Junior	Bike Ride	55	28.4
Raddlebarn Primary	Go-Ride Training	14	2.1
Robin Hood Junior and Infant	Bike to School event	77	16.4
Somerville Primary (NC)	None	16	4.8
St. Francis CE Primary	Bike to School event	112	47.7
St. Gerard's RC Primary	Bike to School event	36	16.4
Town Junior School	Bling/Decorate your Bike	28	12.6

Appendix 2: Targets for the City of Bristol's Cycling Strategy

Introduction

In order to provide assist the City of Bristol Council in producing short, mid term and long term targets for cycling, the following document looks at targets already set in Greater Bristol and in other parts of the world, it then looks at possible targets if the Cycling City and Towns funding levels are continued and finally looks at data sources which could be used for setting and measuring against targets.

Examples of cycling targets

Examples of existing targets are presented in the Table 1 below, including the type of data used to measure progress towards targets and the baseline figures where these are available.

Greater Bristol have already set cycling targets up to 2026 and these figures, along with the Charter of Brussels target with Bristol have also signed up to, are presented in Table 1. Examples of cycling targets set in other UK cities which could be considered to be comparable with Bristol in terms of cycling levels (either at present or aspirationally) are also presented. Finally, three examples of cycling targets set in other European cities with relatively high levels of cycling are presented.

Table 1: Cycling targets in place in the Bristol area, other English cities and three European cities

	The Bristol area			Other English cities			Other European cities		
Year	**Charter of Brussels (2009)**[i]	**Greater Bristol strategy**[ii] **– mode share for all journeys**	**Greater Bristol strategy – mode share for journeys to work**	**York**: am peak, pm peak and 12 hour counts of cyclists (representing city-wide cycle usage) [iii]	**Cambridge (**Cycling City and Towns): cycling trips[iv]	**Cambridgeshire** (Local Transport Plan 2011-2020[v]): cycling levels	Copenhagen: mode share of trips by bicycle to work and school[vi]	Odense: mode share for cycling[vii]	Bremen: mode share for cycling[viii]
2004/06						Baseline			
2006					Baseline				
2008		Baseline: 4%	Baseline: 9%					Baseline: 25%	
2009/10				Baseline: 1,800, 1,400 and 10,900 per day respectively					
2010							Baseline: 35%		
2011					12.1% increase [ix]				
2012/13						22% increase			
2014/15				3% increase in each measure					
2015		9%	14%				50%		
2019		12%	18%						
2020	15%						50%	34%	30%
2023		16%	24%						

2025							50%		
2026		20%	30%						

An alternative to a mode share approach would be to look at the proportion of people in the area who are cycling. This has been used by Manchester City Council to set the following ambition:

"to have more people cycling in Manchester than any other English City by 2017 (as measured by the Active People Survey)"[x]

The strategy focuses on all types of cycling, including leisure and utility trips and also sport cycling. They plan to achieve this through infrastructure improvements, major cycling events in the area, increasing the capacity within cycle sport groups and recreational groups and improving the dissemination of knowledge about existing cycling participation.

Active People Survey data from Bristol indicates that a demand exists, as 62% of people in the city want to do more sport or physical activity and 20,000 of these people specified that they wanted to cycle more. The British Cycling/Sky national target of increasing the number of people cycling at least once a month by 1 million by 2013 has been quoted in Manchester's strategy, although it is not clear how/if this has been incorporated into the targets

In Copenhagen a mode share approach has been used to set the target, but this has been calculated using travel to work data by mode and distance[xi]. If half of those who drive between 2 and 10 km to work in Copenhagen and a third of those who drive between 10 and 15 km can be encouraged to use their bicycles, then Copenhagen will be close to reaching its target. They have also estimated how their work on reducing travel times for bicycles will increase the number of bicycle trips and help them to reach their target.

Example of projected growth with investment

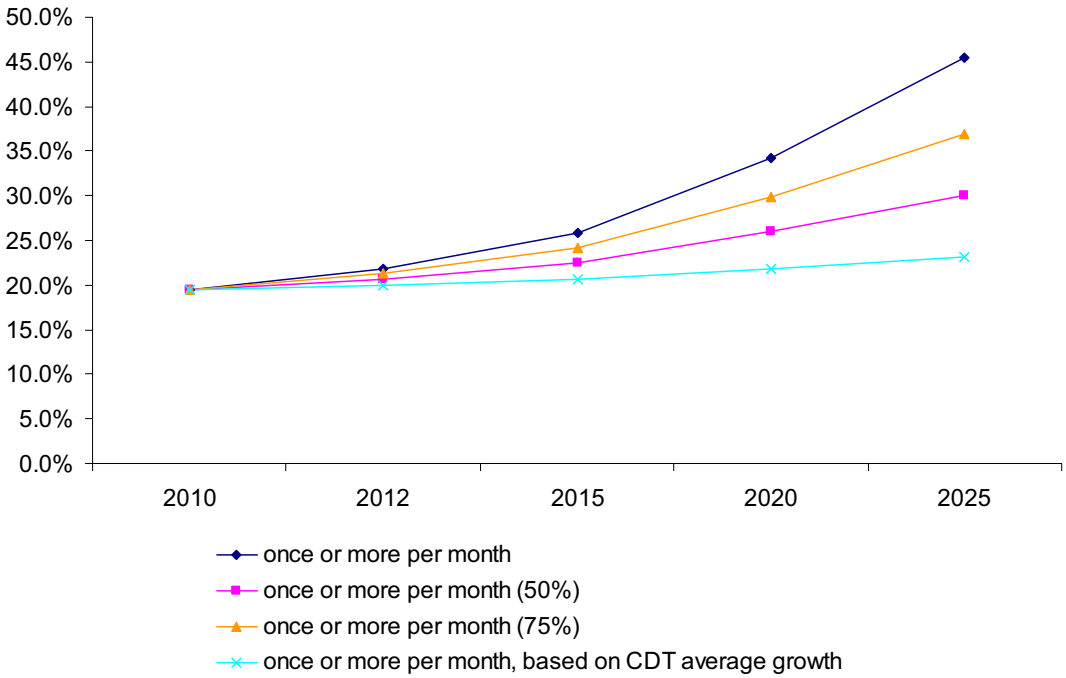
The total investment in cycling-specific schemes in Greater Bristol between 2008 and 2011 as part of the Cycling City and Towns programme was £19,713,922. The following scenario includes examples of projected growth if the same level of investment was maintained in Bristol. This modelling exercise assumes that the significant increases observed during the Cycling City and Towns programme will be maintained, although since comparable data is not yet available for 2011/12 this is currently highly speculative.

The Active People Survey (APS) has been undertaken since 2005/06 and reports on what percentage of respondents in Bristol cycle for 30 minutes a day once or more per month or 12 times or more per month.

In Bristol in 2010/11 (the most recent data available), 19.5% of APS respondents participating in cycling for at least 30 minutes, once or more per month. This will include both leisure and utility trips, although it should be noted that it will underestimate the total level of cycling as trips under 30 minutes are not included.

Chart 1 includes scenarios for future growth in this measure, based on levels of growth observed in the Cycling Demonstration Towns (CDT) and in Greater Bristol over the Cycling City and Town (CCT) programme. Scenarios based on 50% and 75% of the growth observed in Bristol over this period of time have also been included.

Chart 1: Scenarios for growth in Bristol in the number of APS respondents participating in cycling for at least 30 minutes, once or more per month

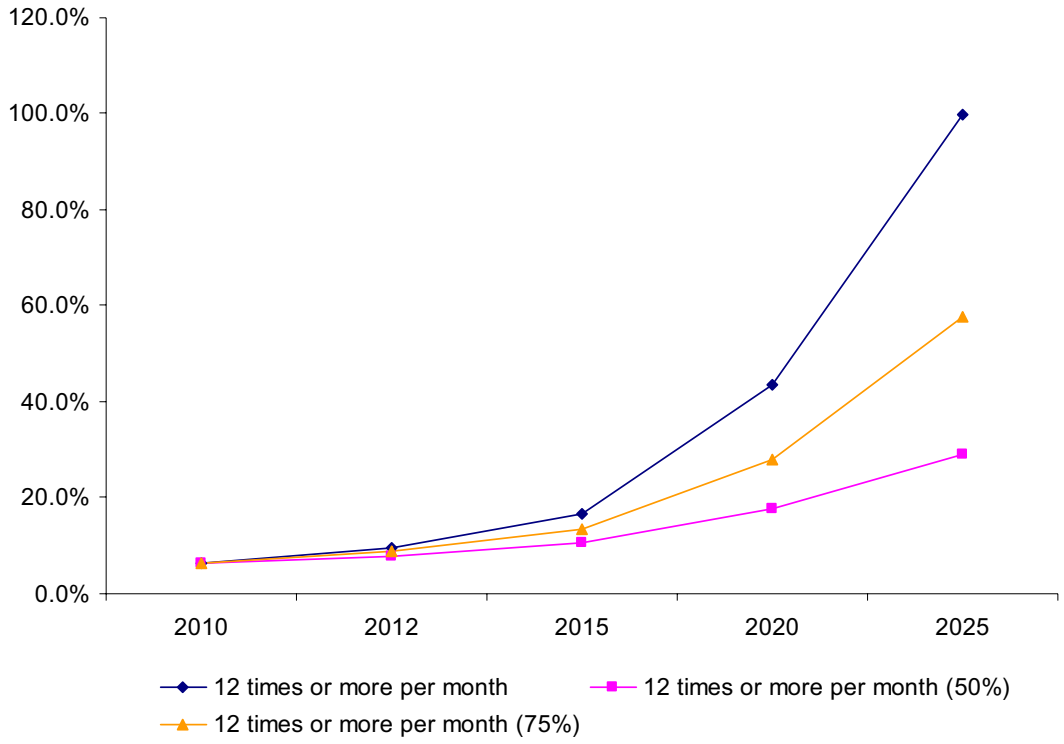


In order to put these figures into context, the equivalent figure in 2010/11 for Cambridge was 34.5% and for York was 17.1%.

In Bristol in 2010/11, 6.5% of APS respondents participating in cycling for at least 30 minutes, 12 times or more times per month. Again, this measure will underestimate the total level of cycling as trips under 30 minutes are not included.

Chart 2 includes scenarios for future growth in this measure, based on levels of growth observed in Greater Bristol over the Cycling City and Town (CCT) programme. No scenario has been produced based on data from the Cycling Demonstration Towns as the combined data showed a decline over the programme period and therefore would not be appropriate for target setting.

Chart 2: Scenarios for growth in Bristol in the number of APS respondents participating in cycling for at least 30 minutes, 12 or more times per month



If the growth rate observed in Bristol during the CCT period was maintained, cycling 12 or more times a month could potentially become a cultural norm within Bristol, with cycling levels on a par with cities within Europe who have invested extensively in cycling provisions. The scenario above showing the growth in cycling levels maintained at 100% of the rate observed during the CCT programme is not realistic, as it exceeds the percentage of individuals cycling once or more per week prior to 2020, even when the growth rates for that measure have been applied. Even if Bristol achieves half of the growth rate achieved during the CCT programme, Bristol could still be one of the leading cities in England in terms of this measure by 2025 (the equivalent figure in 2010/11 for Cambridge was 12.1% and for York was 3.1%).

Baseline and measuring against targets

A number of different data sources are available which could be used for providing a baseline for the targets and for measuring against the targets. Table 2 includes benefits and limitations for these options.

Table2: Data collection mechanisms for measuring progress against targets

Target type	Data collection	Metric	Baseline option	Benefits	Limitations	Comparable with other UK cities/towns	Comparable with other EU cities/towns
Change in overall cycling mode share	Traffic counts	• Mode share of cycling amongst counts of all traffic in a defined period of time	• Existing or specifically commissioned traffic counts	• Gives an indication of mode share • Can be analysed at a city-wide level or focus can be placed on specific communities or traffic corridors	• Does not necessarily include journeys by all residents and changes in route choice by cyclists onto routes not monitored can affect the results •	✓	✓
	Commissioned household level survey	• Detailed mode share information, all journeys	• Specifically commissioned survey	• Can be limited to the City of Bristol • Could collect information on overall mode share, cycling to work and other behaviour and attitudinal questions if required	• This would be a relatively expensive option		

Change in proportions levels of cycling to work	Census	• Cycling mode share for travel to work by Bristol residents and/or people travelling to work in Bristol	• 2001 Census	• Provides information about journeys to work • Includes the majority of people either living or working in Bristol	• The data currently available is out of date • Interim data would not be available for assessing short and mid-term targets • No information about overall levels of cycling	✓ (directly comparable)	✓ (some comparisons possible)
	Big Commuter Count	• Mode of travel to work on day of survey	• 2011 survey results •	• No additional cost as the survey is already in place and many employers know about it	• Not all workplaces take part • Without a core panel of employers participating every year, comparisons can be difficult		
	Commissioned workplace surveys	• Mode of travel to work	• Specifically commissioned survey	• Can be limited to the City of Bristol	• This would be a relatively expensive option		

				• Could collect information on cycling to work and other behaviour and attitudinal questions if required • Responses could be linked to information about employer facilities/cycling initiatives	• Ensuring the participation of a range of key employers for the duration of the strategy- period would be essential in producing meaningful data		
Change in frequency of cycling	Active People Survey	• Frequency of cycling for 30 minutes or more	• 2011 survey	• Will be occurring anyway at no cost to the City of Bristol Council • Bristol data can be compared to other areas if required	• Does not specifically ask about journeys to work • No control over the questions asked in the survey – changes made could impact the usefulness of the data in future • Underestimates short journeys	✓	

Recommendations for target setting in Bristol

- Targets for cycling have already been set for the Greater Bristol area, encompassing the City of Bristol – these relate to overall mode share and mode share for cycling to work.
- We recommend that the City of Bristol set targets measurable by multiple indicators
- We recommend that targets be set around the following: i) overall cycling mode share; ii) overall mode share for commuting journeys; iii) frequency of cycling
- Overall cycling mode share:
    - set baseline based on current cycling mode share from traffic count data (and/or a commissioned household level survey)
    - set target taking into consideration those already in place in the Greater Bristol area and other UK/European cities
    - measure progress against targets using traffic counts in future years (and/or a commissioned household level survey)
- Commuter mode share:
    - set baseline based on Big Commuter Count (and/or commissioned workplace travel surveys)
    - set target taking into consideration those already in place in Greater Bristol and using census information on distance travelled to work to sense check (in terms of commuting trips that are within range for transfer from other modes)
    - measure progress against targets using Big Commuter Count data (making survey more attractive/compulsory to enhance coverage) and/or commissioned workplace travel surveys
- Frequency of cycling:
    - set baseline using APS (and/or commissioned household level survey)
    - set targets taking into consideration current ranking of Bristol in APS and other information from APS on latent demand – suggest a target based around closing the margin between the proportions cycling between Bristol and the top ranking city
    - measure progress against targets using future iterations of APS (and/or commissioned household level survey)

Appendix – detailed results of modelling based on APS

Table A-1: Scenarios for growth in Bristol in the number of APS respondents participating in cycling for at least 30 minutes, once or more per month

	Annual growth factor based on growth over CDT programme (all six towns)	Annual growth factor based on growth within the CCT programme in Bristol	Annual growth factor based on 75% of the growth within the CCT programme in Bristol	Annual growth factor based on 50% of the growth within the CCT programme in Bristol
2010	19.5%	19.5%	19.5%	19.5%
2012	20.0%	21.8%	21.2%	20.6%
2015	20.7%	25.9%	24.1%	22.5%
2020	21.9%	34.3%	29.9%	26.0%
2025	23.2%	45.5%	37.0%	30.0%

Table A-2: Scenarios for growth in Bristol in the number of APS respondents participating in cycling for at least 30 minutes, 12 or more times per month

	Annual growth factor based on growth within the CCT programme in Bristol	Annual growth factor based on 75% of the growth within the CCT programme in Bristol	Annual growth factor based on 50% of the growth within the CCT programme in Bristol
2010	6.5%	6.5%	6.5%
2012	9.5%	8.7%	7.9%
2015	16.8%	13.5%	10.7%
2020	43.4%	27.9%	17.6%
2025	100.0%[xii]	57.9%	28.9%

End notes

[i] The Charter of Brussels was launched at Velo-city 2009 (one of the European Cyclists' Federation's series of conferences. Those who sign pledge to set a target for the modal share for cycling of 15% or more by 2020 (http://www.ecf.com/manifesto/charter-of-brussels/)

[ii] Greater Bristol Cycling City Stakeholder Advisory Panel (2010) Greater Bristol Cycling Strategy 2011-2026, Available at: http://www.betterbybike.info/sites/default/files/attachments/Greater%20Bristol%20Cycling%20Strategy_Issue_2010.09.08.pdf (Accessed 14 September 2012)

[iii] http://www.york.gov.uk/content/45053/64877/64891/Local_transport_plan/ltp3/LTP3.pdf (note: the version online still notes it as being draft subject to full council approval)

[iv] http://www.cambridge.gov.uk/ccm/navigation/transport-and-streets/cycling-and-walking/

[v] http://www.cambridgeshire.gov.uk/NR/rdonlyres/EDB8478E-9462-49D0-A1F0-763FEFD96CB3/0/LTP3ImplementationPlan.pdf

[vi] The City of Copenhagen (2011) Good, Better, Best: The city of Copenhagen's bicycle strategy 2011-2025, The City of Copenhagen, Available at: http://www.kk.dk/sitecore/content/Subsites/CityOfCopenhagen/SubsiteFrontpage/LivingInCopenhagen/CityAndTraffic/CityOfCyclists/~/media/A6581E08C2EF4275BD3CA1DB951215C3.ashx (Accessed 13 September 2012)

[vii] Fietsberaad (2009) Bicycle policies of the European principals: continuous and integral, Publication Number 7, Fietsberaad, Utrecht, Available at: http://www.fietsberaad.nl/library/repository/bestanden/Fietsberaad_publicatie7_Engels.pdf (Accessed 17 September 2012)

[viii] http://www.polisnetwork.eu/publicnews/110/45/Cycling-training-in-Bremen

[ix] (LTP targets against the 2006 baseline, plus 20%, to reflect the increased investment)

[x] Manchester City Council (2012) Interim Strategy for Cycling in Manchester 2012-13, Manchester City Council and British Cycling, Available at: http://www.manchester.gov.uk/egov_downloads/CyclingStrategy.pdf (Accessed 14 September 2012)

[xi] The City of Copenhagen (2011) Good, Better, Best: The city of Copenhagen's bicycle strategy 2011-2025, The City of Copenhagen, Available at: http://www.kk.dk/sitecore/content/Subsites/CityOfCopenhagen/SubsiteFrontpage/LivingInCopenhagen/CityAndTraffic/CityOfCyclists/~/media/A6581E08C2EF4275BD3CA1DB951215C3.ashx (Accessed 13 September 2012)

[xii] This value has been capped at 100% and therefore a lower percentage growth has been applied in the final year

Cycling Trends in Birmingham

Technical report

October 2011

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About Sustrans

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Table of contents

Executive Summary

Birmingham City Council holds a number of different data sets concerned with levels of cycling across the city, allowing analysis of overall levels of cycling throughout the city and the types of journey being made.

Overall, there is an increase in cyclists counted in Birmingham over time. Data recorded in various locations across the city show that:

- counts of cyclists across eight locations in the city have increased by 73% compared to levels in 2003
- the rate of growth in cycling has been more rapid between 2008 and 2011 than in previous years – on average, the daily count of cyclists increased by 11% per year during 2008 – 2011, compared to 7% per year before 2008
- the number of cyclists counted each day ranges, on average, from around 25 to 260, with the greatest numbers being counted on the popular Rea Valley route

Cycle count data show that some routes are more heavily used by cyclists at particular times of day and days of the week than others. At locations where cyclists are counted continuously:

- the average number of cyclists counted per day during the week is, in most cases, greater than the average number of cyclists counted per day at the weekend
- weekday daily counts of cyclists increase by, on average, 11% per year, whilst weekend counts increase by, on average, 7% per year
- on weekdays cycle flows tend to be greatest during peak hours and growth over time in the numbers of cyclists counted on weekdays is concentrated during peak hours – times of day when the majority of trips are for commuting
- cycle routes through Newhall Valley Country Park and Sheldon Country Park are used for leisure purposes. Cycle flows recorded by automatic cycle counters on these routes have increased by, on average, 24% between 2008 and 2011 and 15% per year between 2004 and 2011, respectively

Levels of cycling to school in Birmingham are currently lower than those across England as a whole. Data from 2010 show that:

- the overall levels of pupils cycling to school in Birmingham remained at 0.4% between 2007 and 2010
- 0.4% of primary school pupils cycled to school in Birmingham compared to 1% of pupils across England
- 0.6% of pupils cycled to secondary school in Birmingham compared to 3% of pupils across England

However, where interventions are delivered to encourage and equip children with the skills to travel to school safely by bike, levels of cycling increase substantially. Bike It, Sustrans' school cycling project, has engaged with 24 schools in Birmingham since 2008. Hands up surveys conducted to monitor Bike It in 19 of those schools show that:

- the percentage of pupils regularly cycling to Bike It schools in Birmingham increased from 8.5% before Bike It to 19.9% after engagement in the project
- the relative percentage increase in the proportion of children who cycle regularly to Bike It schools in Birmingham is greater than in Bike It schools across England as a whole – for schools engaged in Bike It in the 2010/11 academic year, the relative percentage change in pupils cycling regularly to school was 216% in Birmingham, compared to 81% for all Bike It schools across England

Total accidents involving cyclists recorded between 2001-2005 and 2006-2010 decreases, however the number of serious injury accidents increases:

- 1,207 accidents were recorded between 2001 and 2005 compared to 1,176 accidents recorded between 2006 and 2010
- 115 serious injury accidents were recorded between 2001 and 2005, compared to 167 between 2006 and 2010 – this represents a statistically significant change
- this change should be considered against the overall increase in cycling levels suggested by the other data sources available, however any accident involving a cyclists, no matter what the severity, is of course a matter to be taken very seriously

1 Introduction

1.1 Background

Birmingham City Council commissioned Sustrans' Research and Monitoring Unit to undertake a review of all data currently held on levels of cycling in the city, and prepare a plan for monitoring and evaluation of cycling going forward. The purpose of this document is to report the findings of the review and analysis of existing cycling data for Birmingham. The proposed monitoring and evaluation framework is presented in the accompanying document 'Cycling in Birmingham: monitoring and evaluation framework and plan'.

Birmingham City Council is in the process of reviewing approaches to monitoring cycling in the city. The analysis and interpretation of data collected to date and presented herein represents an overview of the current state of cycling in Birmingham and a baseline against which future monitoring findings can be compared.

1.2 Data sources

Sources of data on cycling in Birmingham reviewed in this report include:

- continuous count data from automatic cycle counters
- cordon counts of all traffic entering Birmingham city centre
- a single cordon count of cycles entering Birmingham city centre and Sutton Coldfield
- levels of cycling to schools in Birmingham where the Bike It programme has been delivered (from Bike It monitoring)
- levels of cycling to all schools in Birmingham (from the Pupil Level Annual School Census)
- counts of parked bikes across Birmingham
- counts of parked bikes at railway stations in Birmingham
- accident data.

1.3 Form, content and function of this report

This report is presented in three sections.

The first presents data concerned with **overall levels of cycling** in Birmingham, drawing on automatic cycle count data, counts of parked bikes and accident data. The second presents data concerned with **cycling to school**, and the third examines trends in cycling for **commuting and leisure journeys**.

2 Overall levels of cycling

In this section we review sources of data pertaining generally to levels of cycling across the Birmingham city area, rather than being focused on specific types of cycling journeys, or interventions focused on encouraging cycling within particular groups. Continuous counts of cyclists recorded by automatic cycle counters are the most valuable type of data to support understanding of levels of cycling at a specific location. However, there are limitations to these in that coverage is not complete, and the data relate to total volumes of cyclists - individuals making journeys cannot be identified, and this source gives no indication of the purpose of cycling journeys. We also draw on manual counts of cyclists, counts of parked bikes and accident statistics collected in the area of interest.

2.1 Automatic cycle counter data

Key headlines:

- median daily counts across eight automatic cycle counters across Birmingham range from around 50 cyclists to more than 200 cyclists per day
- for the five locations where sufficient data are available to perform the analysis, the annual percentage change in the daily median count ranges from 2.3% to 14.7%; a greater rate of growth is apparent in the period 2008-2011 compared to pre-2008
- based on all available count data, the overall change in levels of cycling recorded across the eight locations is around 70% against a 2003 baseline – this change relates only to the locations where counters are installed and does not necessarily reflect citywide changes in cycling
- for some sites, this growth is associated mainly with an increased number of cyclists at key commuting times, whilst for others, growth is spread across the day
- for most counters, a greater proportion of cyclists are counted on weekdays compared to weekend days
- several automatic cycle counters show distinct peaks in the volumes of cyclists recorded in the morning and afternoon, at the times of day typically associated with commuting to work
- weekend day data do not exhibit such peaks in the volumes of cyclists recorded.

2.1.1 Introduction

Data have been received from eight continuous automatic cycle counters located across Birmingham. In the following sections we review the quality and quantity of data available for each counter and present the findings of two sets of analysis. The first is concerned with trends in data recorded at each of the eight individual sites. The second uses data from all of the counters together to make an estimate of overall changes in levels of cycling

at these locations against a 2003 baseline. Further analysis of the diurnal distribution of counts is presented in the section of this report concerned with commuting and leisure cycling (section 4).

2.1.2 Analysis of individual counters

For each of the eight counters, median daily counts have been generated based on seven day, weekday and weekend day data. Where more than three years of data are available, the time series has been analysed using the seasonal Kendall slope estimator method to obtain an expression of the rate of change over time. Where sufficient data are available to do so, the rate of change in counts is calculated and reported separately for data collected before 2008 and data collected in the period 2008-2011 in order to provide an expression of change for this period when, anecdotally, levels of cycling appeared to be increasing across the city. The location of the automatic cycle counters and the annual change in the daily count (where this can be calculated) are presented in Figure 1.

Pershore Road

The counter located on Pershore Road collects data on all traffic types. Cycles are counted by six of the eight channels, distinguishing cycles counted on the road from those counted on the footpath. Data from 2003 onwards are included in the analysis.

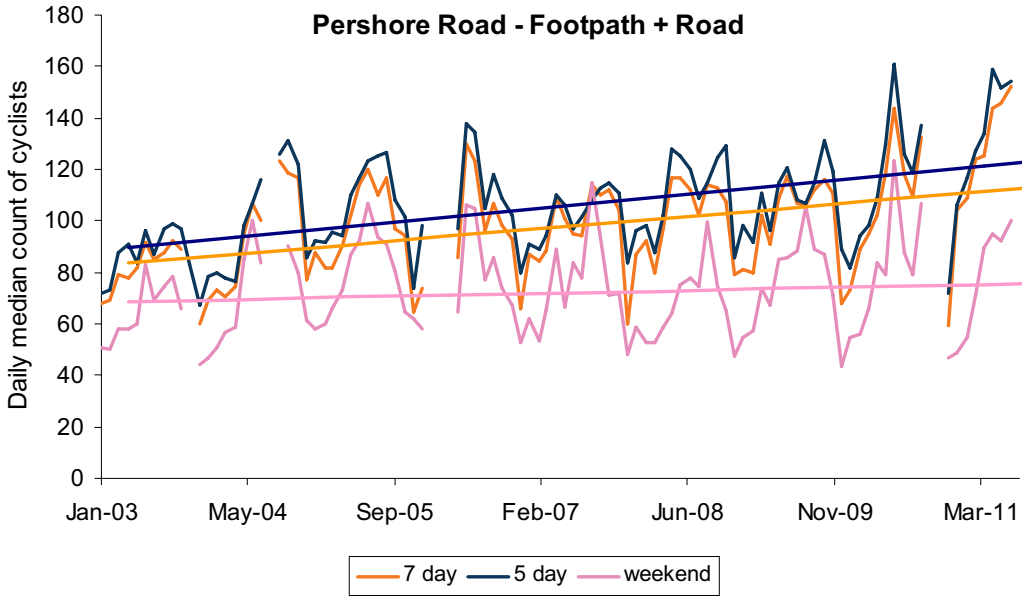
The data indicate a higher level of cycling on weekdays compared to weekend days, and a greater number of cyclists counted using the footpath rather than the road. Analysis of count data available from 2003 to 2011 indicates a generally positive trend over time, with the exception of numbers of cyclists recorded on the footpath on weekends, where the trend indicates a slight decrease over time. There is a greater increase over time in volumes of cyclists recorded using the road, and a greater increase in cycling on weekdays compared to weekend days. The median daily count of cyclists across the whole time series, and the average annual percentage change in the median daily count are presented in Table 1 for the total count recorded at Pershore Road and the count on the road and footpath. Data are presented for all days, weekdays and weekend days for the periods 2003-2011, 2003-2007 and 2008-2011. Detailed results are presented in the appendix to this report.

Table 1: Median daily count across the time series and % change in the annual average daily count – Pershore Road

2003-2011		7 day	5 day	Weekend day
Footpath + road	Median across whole time series	96	104	70
	% change	3.6	3.8	1.2
Footpath	Median across whole time series	56	59	44
	% change	2.1	3.0	-0.6
Road	Median across whole time series	39	44	26
	% change	5.4	5.3	4.3
2003-2007		**7 day**	**5 day**	**Weekend day**
Footpath + road	Median across whole time series	91	98	69
	% change	3.4	4.3	2.9
Footpath	Median across whole time series	53	56	44
	% change	2.7	4.2	2.3
Road	Median across whole time series	36	40	25
	% change	1.7	2.5	4.3
2008-2011		**7 day**	**5 day**	**Weekend day**
Footpath + road	Median across whole time series	104	112	71
	% change	8.5	5.8	7.0
Footpath	Median across whole time series	58	64	43
	% change	1.3	3.9	2.3
Road	Median across whole time series	44	49	28
	% change	10.2	9.2	11.6

The median daily count for all months in the time series is presented in Chart 1 for all cyclists recorded. Solid lines plotted through the time series indicate the rate of change over time.

Chart 1: Median daily count of cyclists recorded on Pershore Road footpath and road. Solid lines plotted through the time series indicate the rate of change in the count recorded over time.



Birmingham and Fazeley Canal

This counter is located on a traffic free path alongside the Birmingham and Fazeley canal, north of Rocky Lane. Cycles are counted travelling in both directions. Data from 2003 onwards are included in the analysis.

The data indicate a higher level of cycling on weekdays compared to weekend days. Analysis of count data available from 2003 to 2011 indicates a positive trend over time. The median daily count of cyclists across the whole time series and the average annual percentage change in the median daily count are presented in Table 2 for the total count recorded at Birmingham and Fazeley Canal. Data are presented for all days, weekdays and weekend days for the periods 2003-2011, 2003-2007 and 2008-2011. Detailed results are presented in the appendix to this report.

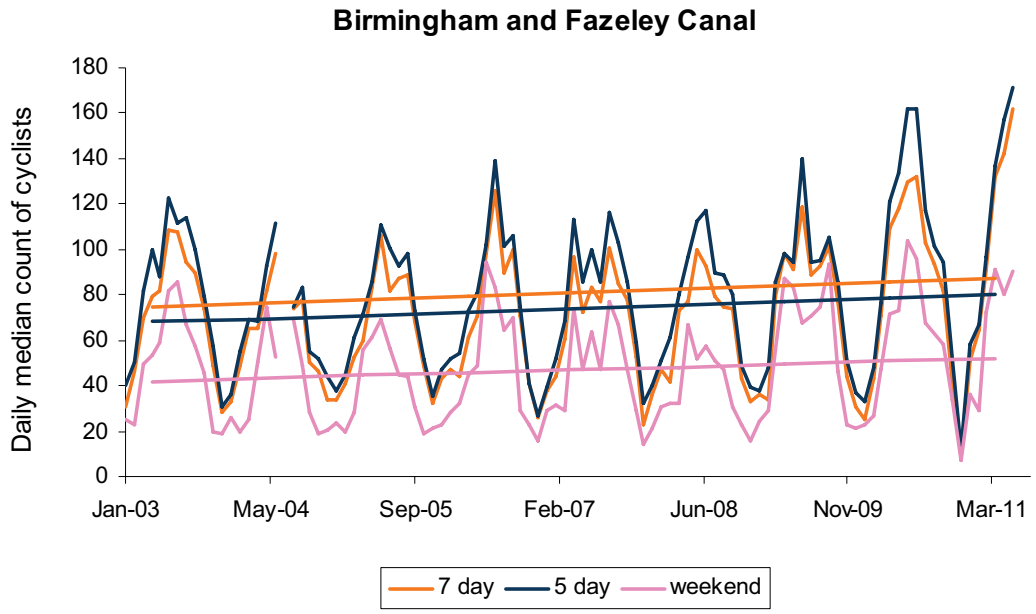
Table 2: Median daily count across the time series and % change in the annual average daily count – Birmingham Fazeley Canal

2003-2011	7 day	5 day	Weekend day
Median across whole time series	65	74	42
% change	2.3	2.2	3.0
2003-2007	**7 day**	**5 day**	**Weekend day**
Median across whole time series	60	69	39

% change	-1.4	-0.7	1.3
2008-2011	**7 day**	**5 day**	**Weekend day**
Median across whole time series	72	82	47
% change	18.1	11.7	15.9

The median daily count for all months in the time series is presented in Chart 2. Solid lines plotted through the time series indicate the rate of change over time.

Chart 2: Median daily count of cyclists recorded at Birmingham and Fazeley Canal. Solid lines plotted through the time series indicate the rate of change in the count recorded over time.



Rea Valley Cycleway

This counter is located on National Cycle Network Route 5, on the Rea Valley Cycleway opposite Third Avenue, on a cycle track on a footpath. The Rea Valley route is well established and anecdotal evidence suggests a growth in use by cyclists over time. Data from 2003 onwards are included in the analysis.

The data indicate a higher level of cycling on weekdays compared to weekend days. Analysis of count data available from 2003 to 2011 indicates a positive trend over time. The median daily count of cyclists across the whole time series, and the average annual percentage change in the median daily count are presented in Table 3 for the total count recorded on the Rea Valley Cycleway. Data are presented for all days, weekdays and weekend days for

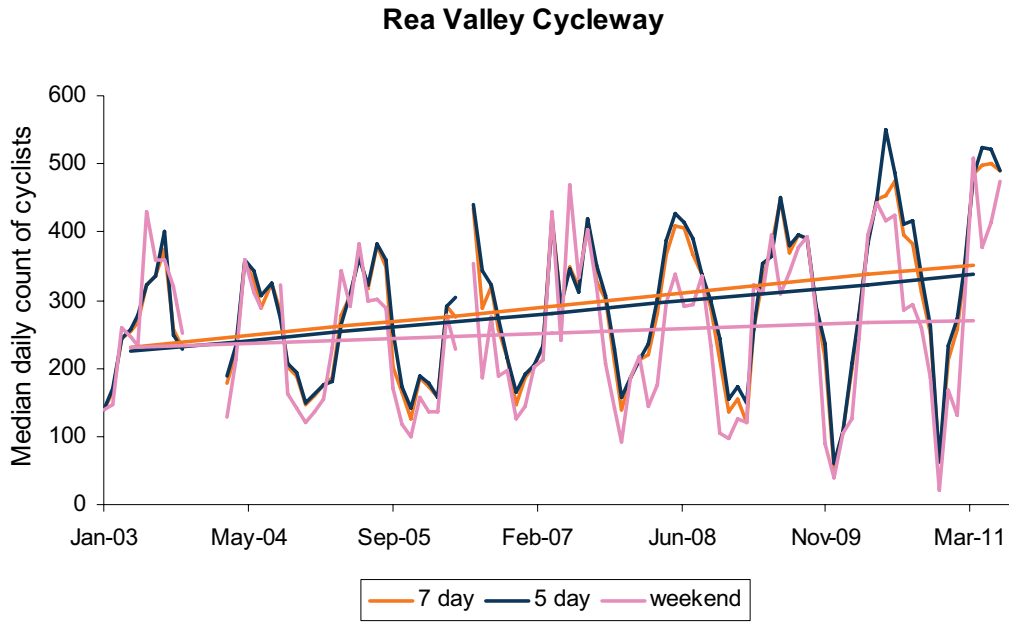
the periods 2003-2011, 2003-2007 and 2008-2011. Detailed results are presented in the appendix to this report.

Table 3: Median daily count across the time series and % change in the annual average daily count – Rea Valley Cycleway

2003-2011	7 day	5 day	Weekend day
Median across whole time series	260	272	231
% change	5.4	5.6	2.1
2003-2007	**7 day**	**5 day**	**Weekend day**
Median across whole time series	236	243	220
% change	4.6	5.0	1.1
2008-2011	**7 day**	**5 day**	**Weekend day**
Median across whole time series	296	309	245
% change	9.5	9.2	11.0

The median daily count for all months in the time series is presented in Chart 3 for all cyclists recorded. Solid lines plotted through the time series indicate the rate of change over time.

Chart 3: Median daily count of cyclists recorded on the Rea Valley Cycleway. Solid lines plotted through the time series indicate the rate of change in the count recorded over time.



During 2010 solar studs were installed in the Hazelwell Park area. A secondary analysis of counter data collected on the Rea Valley Cycleway was performed to investigate if any influence of this could be seen within the data. This analysis is presented in the appendix to the report. Whilst it found there to be a general increase in the volumes of cycles at the times of year and day when solar studs might be expected to prove helpful to cyclists between 2009 and 2010, this pattern was also seen in data from other counters where solar studs had not been installed.

Sheldon Country Park

This counter is located on a traffic free route through Sheldon Country Park. This is a relatively new route, providing a shorter journey for utility trips than was previously possible. Anecdotal evidence suggests a rapid growth in use of the route, although some cyclists may have transferred to this from other routes. Data are available from 2004 onwards.

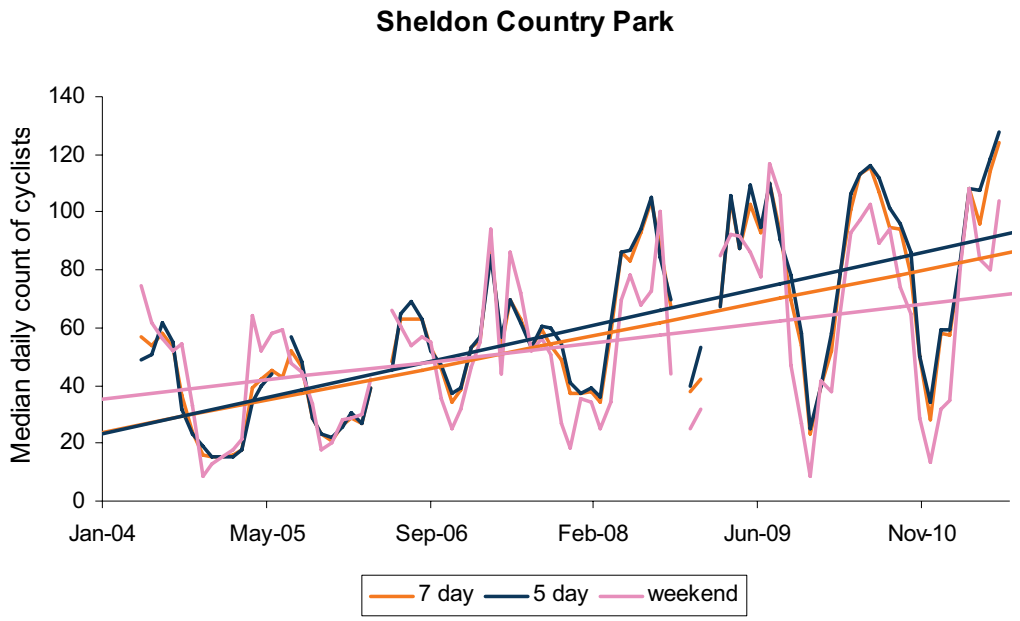
The data indicate a higher level of cycling on weekdays compared to weekend days. Analysis of count data available from 2004 to 2011 indicates a positive trend over time. The median daily count of cyclists across the whole time series, and the average annual percentage change in the median daily count are presented in Table 4 for the total count recorded at Sheldon Country Park. Data are presented for all days, weekdays and weekend days for the periods 2004-2011, 2004-2007 and 2008-2011. Detailed results are presented in the appendix to this report.

Table 4: Median daily count across the time series and % change in the annual average daily count – Sheldon Country Park

2004-2008	7 day	5 day	Weekend day
Median across whole time series	56	57	50
% change	14.7	16.1	9.6
2004-2007	**7 day**	**5 day**	**Weekend day**
Median across whole time series	43	43	42
% change	20.9	22.1	13.7
2008-2011	**7 day**	**5 day**	**Weekend day**
Median across whole time series	74	79	61
% change	8.4	9.7	9.4

The median daily count for all months in the time series is presented in Chart 4 for all cyclists recorded. Solid lines plotted through the time series indicate the rate of change over time.

Chart 4: Median daily count of cyclists recorded in Sheldon Country Park. Solid lines plotted through the time series indicate the rate of change in the count recorded over time.



Newhall Valley Country Park

The cycle counter in Newhall Valley Country Park is located on National Cycle Network Route 534. The route through Newhall Valley Country Park has been the focus of development over the last five years, expanding the cycling network in this area. Data are available from 2008 onwards.

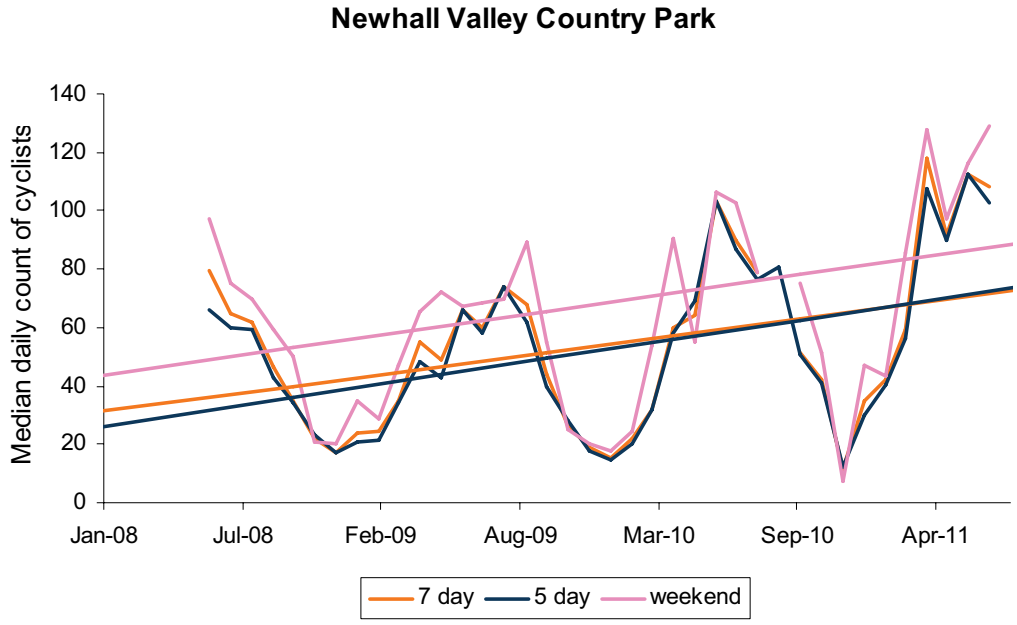
The data indicate a higher level of cycling on weekend days compared to weekdays. Analysis of count data available from 2008 to 2011 indicates a positive trend over time. The median daily count of cyclists across the whole time series, and the average annual percentage change in the median daily count are presented in Table 5 for the total count recorded at Newhall Valley Country Park. Data are presented for all days, weekdays and weekend days. Detailed results are presented in the appendix to this report.

Table 5: Median daily count across the time series and % change in the annual average daily count – Newhall Valley Country Park

2008-2011	7 day	5 day	Weekend day
Median across whole time series	48	45	60
% change	24.0	29.4	20.7

The median daily count for all months in the time series is presented in Chart 5 for all cyclists recorded. Solid lines plotted through the time series indicate the rate of change over time.

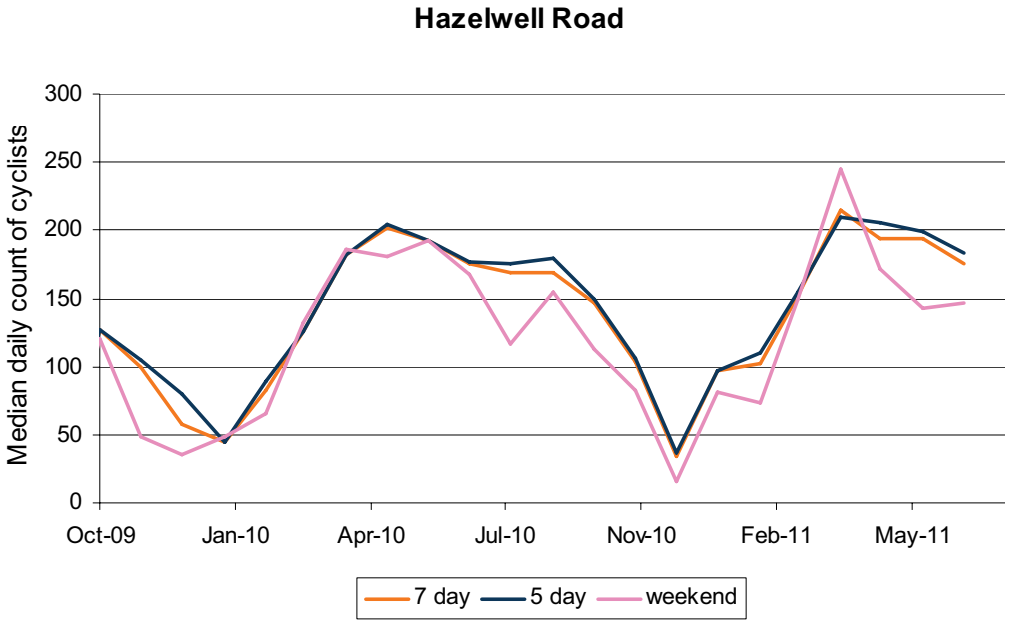
Chart 5: Median daily count of cyclists recorded in Newhall Valley Country Park. Solid lines plotted through the time series indicate the rate of change in the count recorded over time.



Hazelwell Road

The cycle counter on Hazelwell Road is located on National Cycle Network Route 5. Data are available from 2009 onwards. The data indicate a higher level of cycling on weekdays compared to weekend days. Insufficient data are available to calculate changes in levels of cycling over time at this location. The median daily count for all months in the time series is presented in Chart 6.

Chart 6: Median daily count of cyclists recorded at Hazelwell Road.

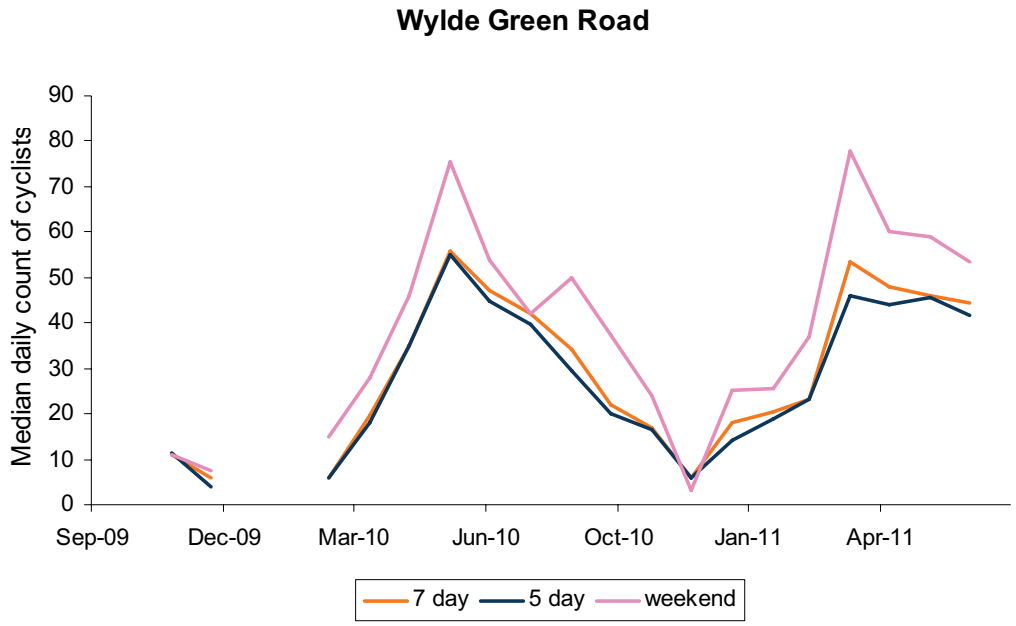


Wylde Green Road

The cycle counter on Wylde Green Road is located on National Cycle Network Route 534. Data are available from 2009 onwards.

The data indicate a higher level of cycling on weekend days compared to weekdays. Insufficient data are available to calculate changes in levels of cycling over time at this location. The median daily count for all months in the time series is presented in Chart 7.

Chart 7: Median daily count of cyclists recorded at Wylde Green Road.



Ladywood

The counter located at Ladywood was installed to monitor a Links to Schools scheme. Data are available only from February 2011 onwards.

Analysis of data available to date indicates a higher level of cycling on weekdays compared to weekend days. Insufficient data are available to calculate changes in levels of cycling over time at this location. The median daily count for all months in the time series is presented in Chart 8.

Chart 8: Median daily count of cyclists recorded at Ladywood.

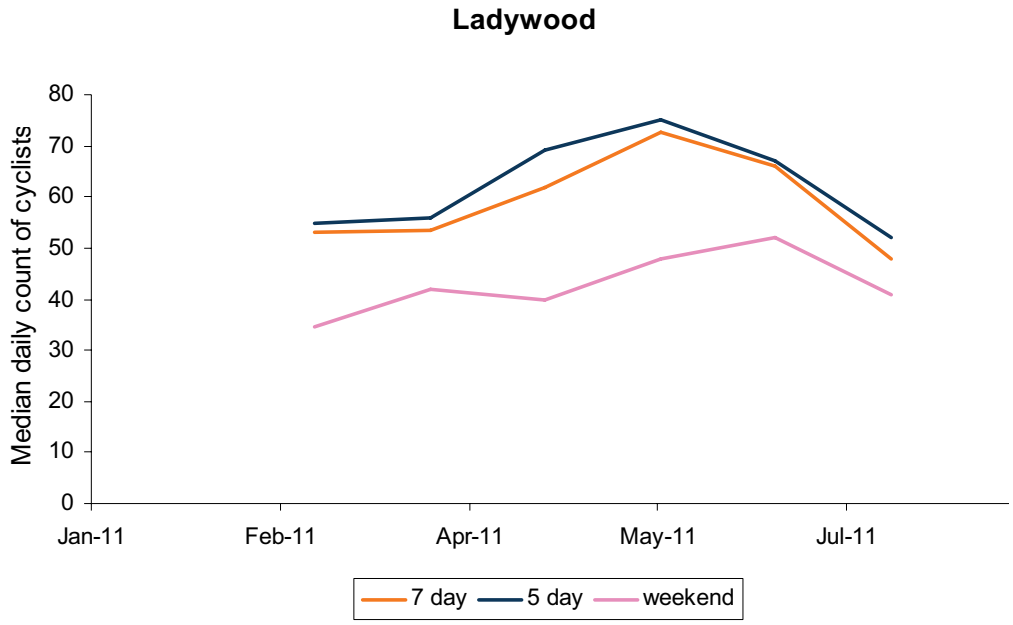
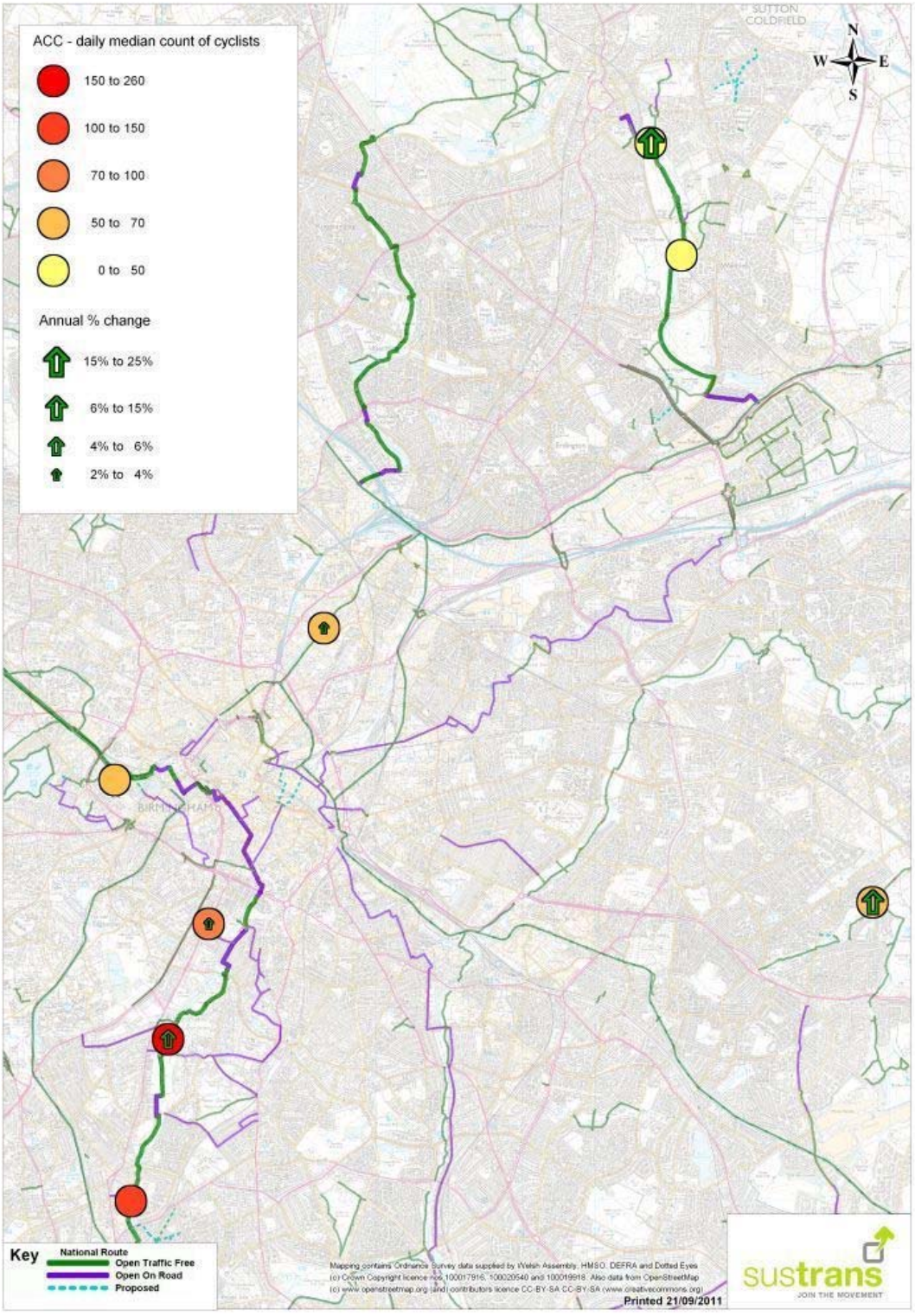


Figure 1: Median daily count and annual average percentage change in the median daily count recorded by automatic cycle counters, and three hour average manual counts of cyclists recorded on weekdays



2.1.3 Estimation of change in cycling levels based on data from all automatic cycle counters

All data available across the eight sites from 2003 onwards were analysed using a negative binomial multiple regression model to determine percentage change in levels of cycling against a 2003 baseline. The results of this analysis provide an expression of the overall change only for the specific locations where the counters are positioned, and do not necessarily represent trends across the city a whole.

A series of calculations were performed:

- percentage change against a 2003 baseline using all data available (but excluding exceptionally large peaks in counts associated with Sky Rides in order to give a representative picture of changes in general cycling levels over time)
- percentage change against a 2003 baseline using weekday data
- percentage change against a 2003 baseline using weekend day data
- percentage change against a 2003 baseline using all data but excluding counters on key leisure routes where high levels of growth have been recorded in recent years (Sheldon and Newhall Valley Country Parks).

In all cases, a variable was included in the model to account for the poor winter weather in recent years.

Considering all data from all counters, a 73% increase in levels of cycling is estimated against 2003 baseline data. Analysing weekday and weekend day data separately indicates a greater rate of growth in weekday use, consistent with the findings of analysis performed for individual counters. Growth in use recorded by the counters located in Sheldon Country Park and Newhall Valley Country Park contributes substantially to the overall growth in cycling levels since 2003. Removing these counters from the calculation gives a 62% change against the 2003 baseline.

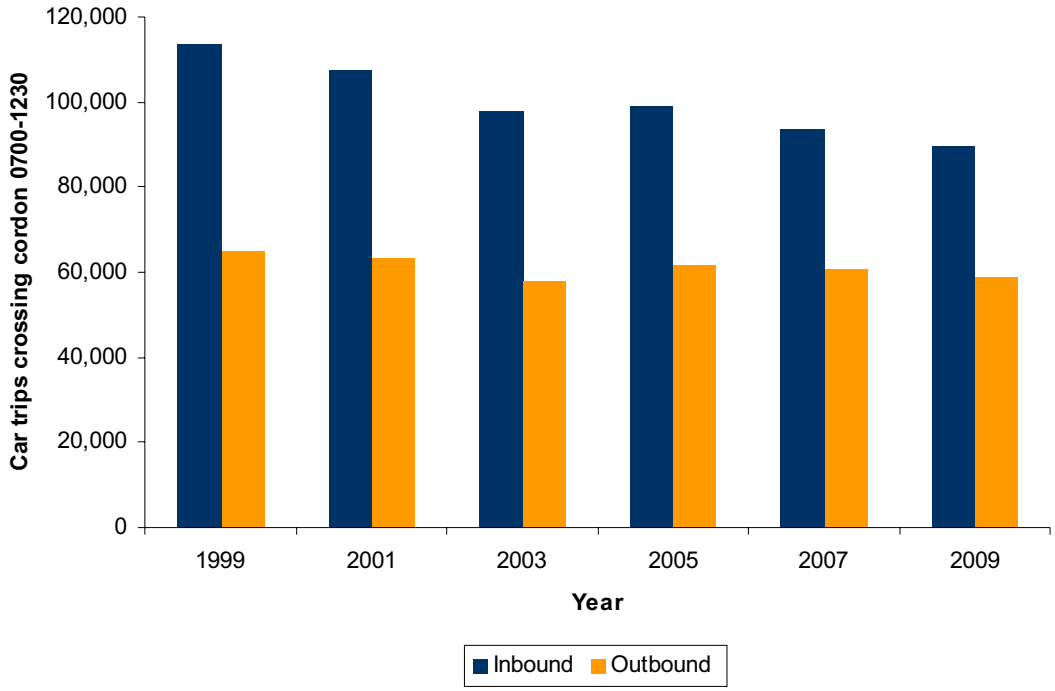
Table 6: Estimated change in overall levels of cycling recorded by eight automatic cycle counters against a 2003 baseline

	% change against 2003 baseline (2003 = 100%)								
Data set	2003	2004	2005	2006	2007	2008	2009	2010	2011
All data (outliers removed)	**100%**	**93%**	**93%**	**99%**	**110%**	**107%**	**119%**	**134%**	**173%**
Weekday data	100%	93%	93%	100%	112%	112%	120%	136%	179%
Weekend day data	100%	92%	96%	97%	105%	96%	114%	129%	160%
'Leisure' route counters removed	100%	100%	101%	102%	108%	106%	113%	126%	162%

2.1.4 Changes in counts of other traffic

Counts of traffic crossing a cordon around Birmingham city centre are performed every other year. The number of car trip crossing the cordon, inbound and outbound between 7am and 12.30pm are presented in Chart 9. Data collected from 1999 onwards suggest a slight decline in the number of car trips to and from the city centre over time.

Chart 9: Car trips crossing a cordon around Birmingham city centre between 7am-12.30pm



2.2 Manual cordon counts of cyclists

Key headlines:

- cordon counts performed in summer 2011 indicate a greater volume of inbound than outbound cyclists during the count period
- the distinction between inbound and outbound counts is more marked on weekdays than Saturdays.

2.2.1 Introduction

During summer 2011, a single iteration of manual counts of cyclists was performed in Birmingham. As there is no time series of manual count data, it is not possible to make any calculations of change over time, rather these counts represent a snap shot of cycling into specific areas at a given time.

Three groups of counts were performed:

- counts on canal towpaths in Birmingham (five locations)
- cordon counts on roads around Birmingham (17 locations)
- cordon counts on roads around Sutton Coldfield (10 locations).

In each case, counts were conducted between 7am and 10am on four weekdays and between 11am and 2pm on two Saturdays. All counts were performed in June and July. For all counts, inbound and outbound cyclists were recorded separately. For cordon counts on roads around Birmingham and Sutton Coldfield, cyclists were counted using the road and the footpath. The locations of the counts are presented in Figure 2.

2.2.2 Analysis

Canal towpaths

Counts of cyclists on canal towpaths are presented in Charts 10 and 11. For most sites, greater volumes of cyclists are counted on weekdays than on Saturdays. On weekdays, the inbound count is greater than the outbound for all but the Birmingham and Warwick canal site, with a particularly marked distinction between the inbound and outbound count for the Worcester and Birmingham canal count site. Inbound and outbound sites are more balanced in terms of the volumes of cyclists recorded in counts performed on Saturdays.

Chart 10: Three hour average counts recorded on weekdays, canal towpaths

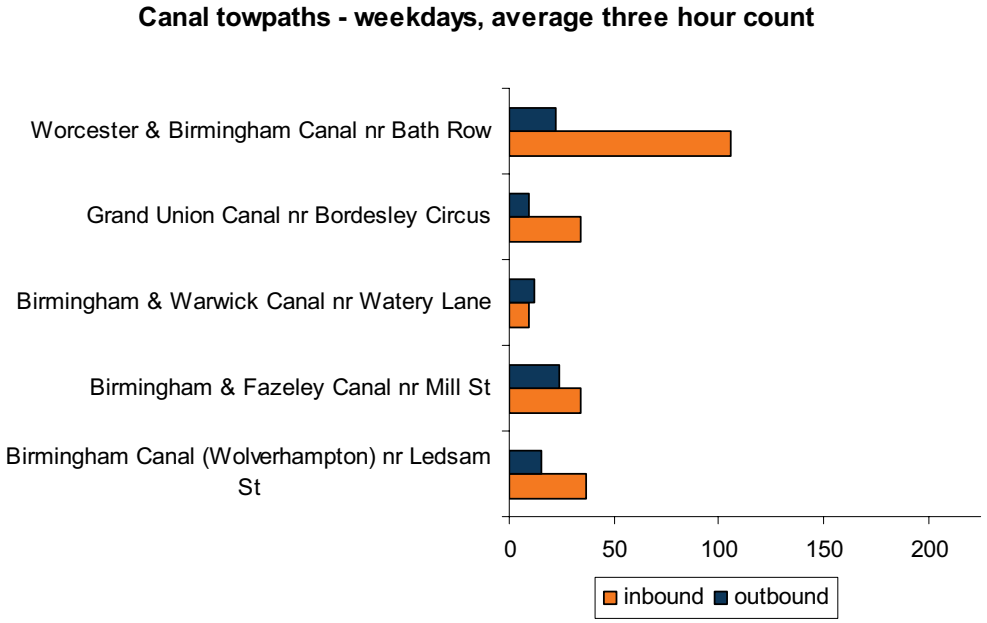
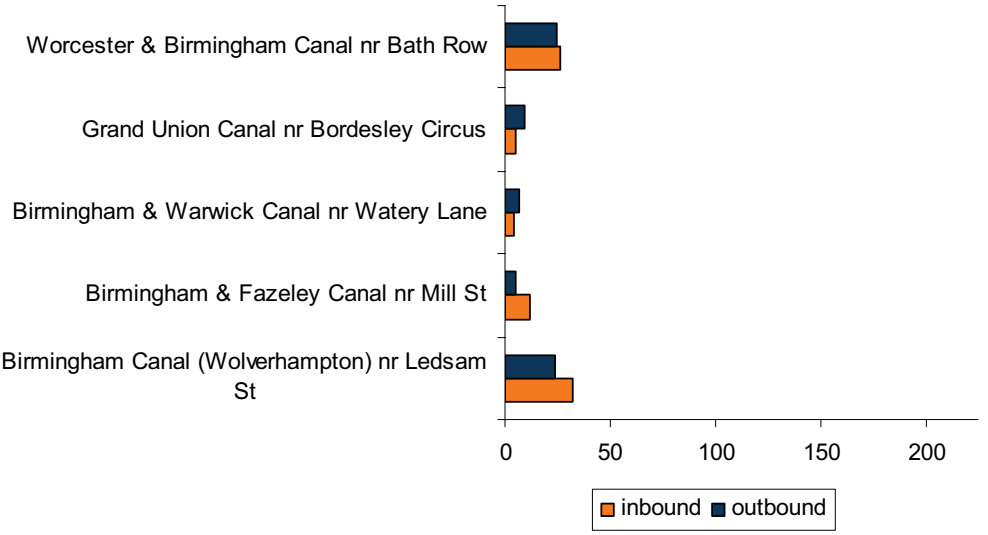


Chart 11: Three hour average counts recorded on Saturdays, canal towpaths



2.2.3 Birmingham road cordon

Numbers of cyclists counted on the Birmingham road cordon are presented in Chart 12 – Chart 15. Substantially greater numbers of cyclists are recorded cycling on the road on weekdays compared to those using the path. On weekends, the numbers of cyclists using the road and path are similar. The Horton Square, Broad Street, Bristol Street and Sherlock Street sites have particularly high levels of use by inbound cyclists on weekdays.

Chart 12: Three hour average counts recorded on weekdays, Birmingham road cordon – cyclists on road

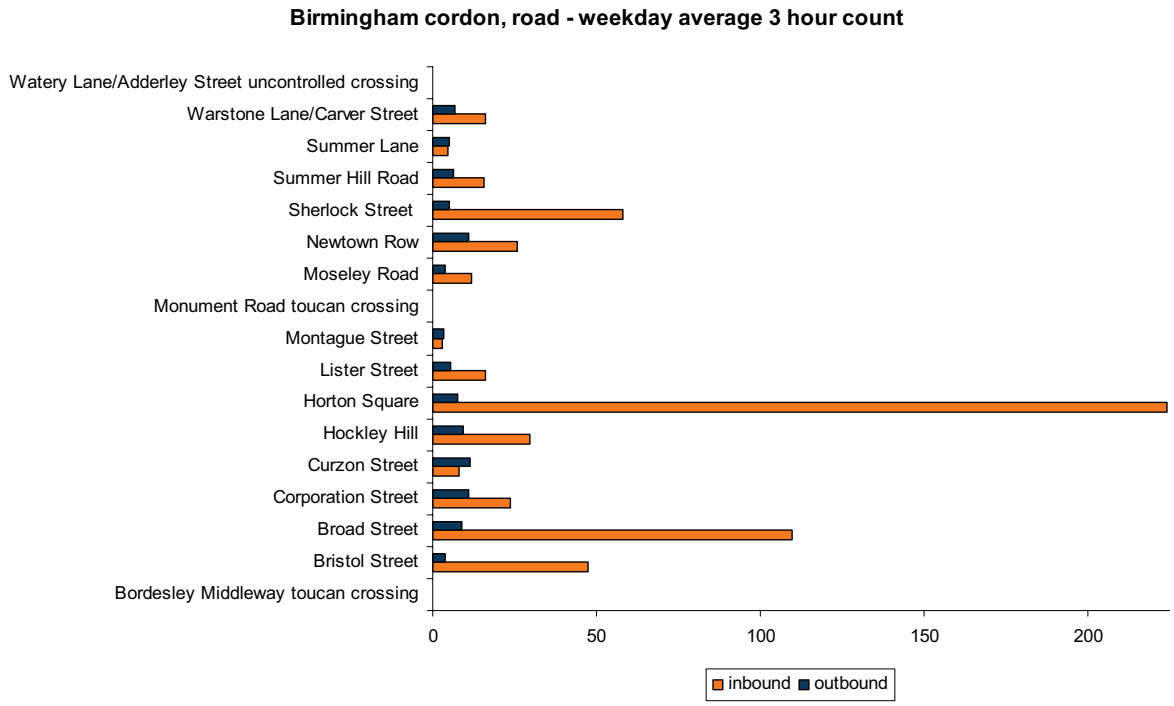


Chart 13: Three hour average counts recorded on weekdays, Birmingham road cordon – cyclists on path

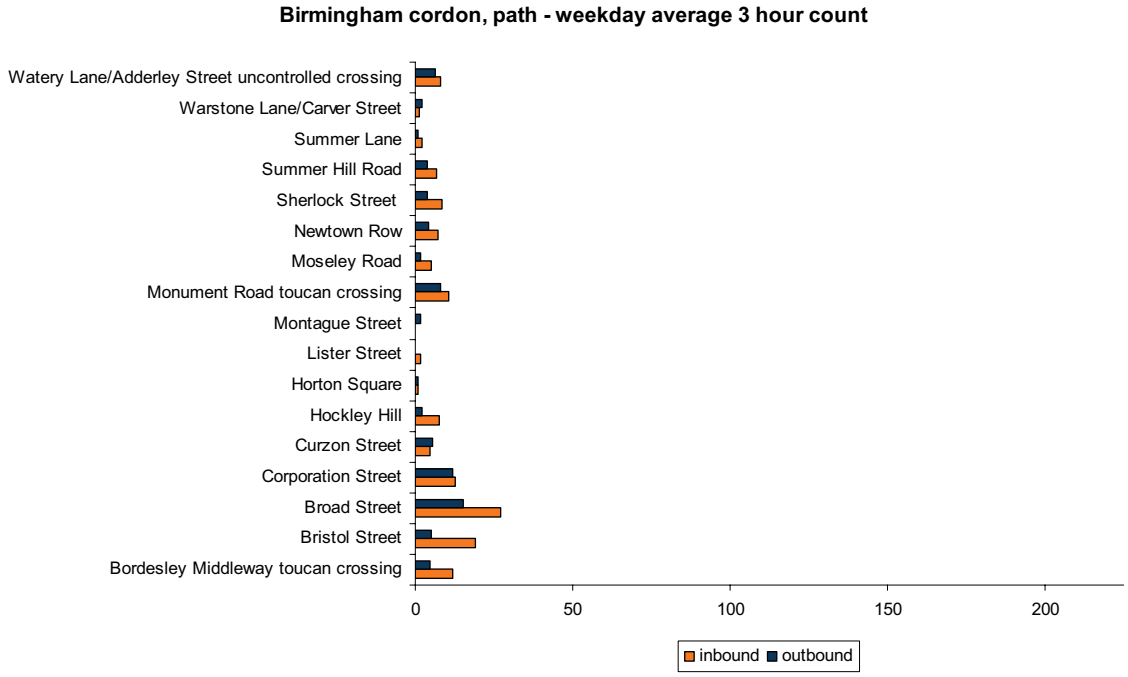


Chart 14: Three hour average counts recorded on Saturdays, Birmingham road cordon – cyclists on road

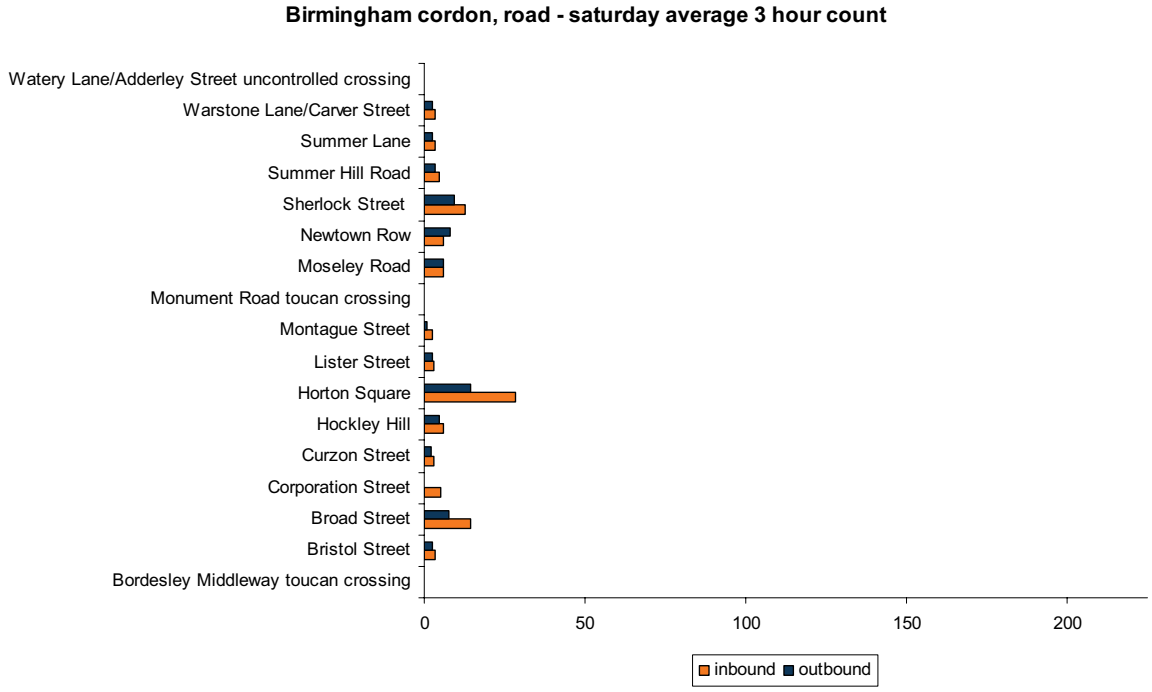
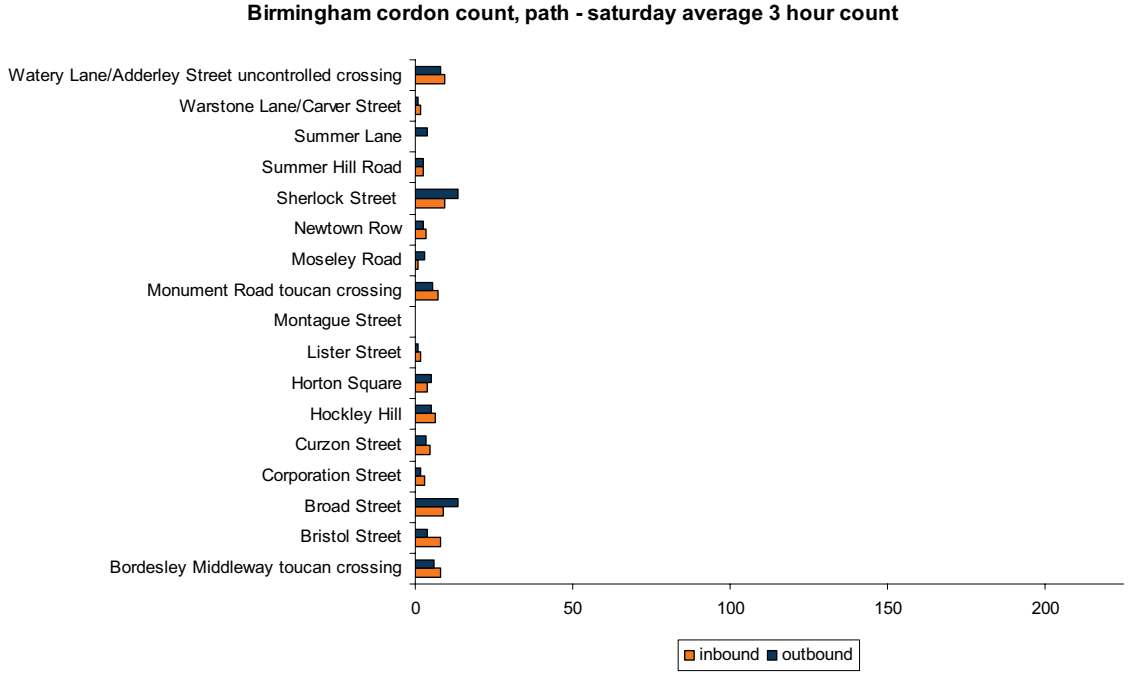


Chart 15: Three hour average counts recorded on Saturdays, Birmingham road cordon – cyclists on path



2.2.4 Sutton Coldfield road cordon

Cyclists counted on the Sutton Coldfield road cordon are presented in Chart 16 – Chart 19. The numbers of cyclists recorded on weekdays and Saturdays is

broadly similar across the sites in the Sutton Coldfield cordon. As for the Birmingham cordon, a greater number of cyclists are recorded cycling on the road than on the path, although there is some variability in this between sites.

Chart 16: Three hour average counts recorded on weekdays, Sutton Coldfield road cordon – cyclists on road

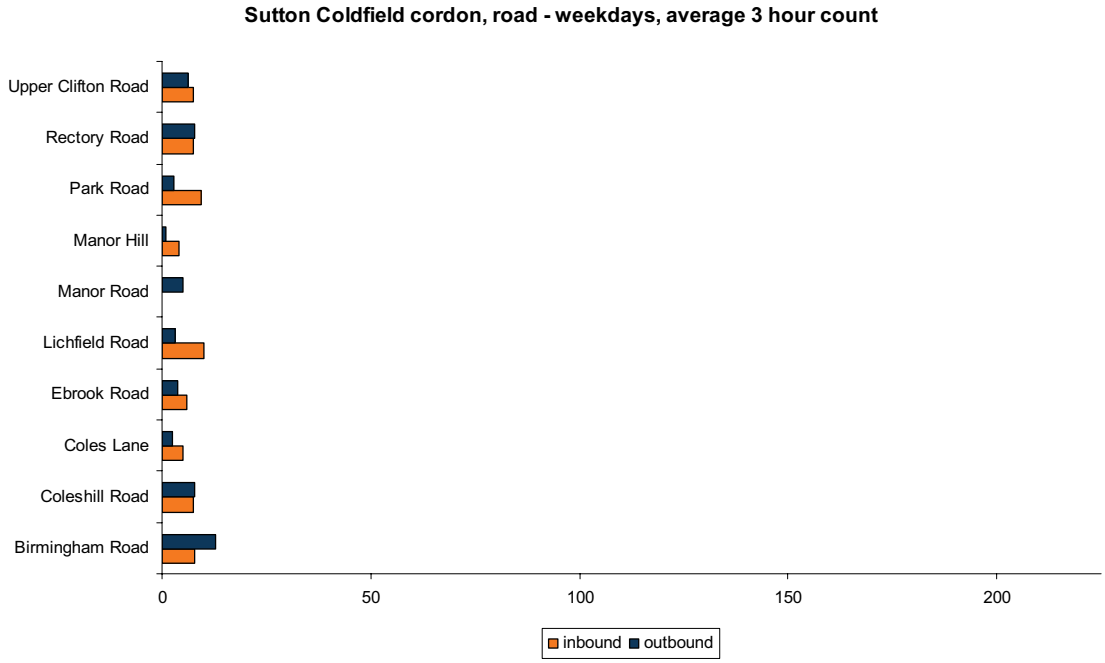


Chart 17: Three hour average counts recorded on weekdays, Sutton Coldfield road cordon – cyclists on path

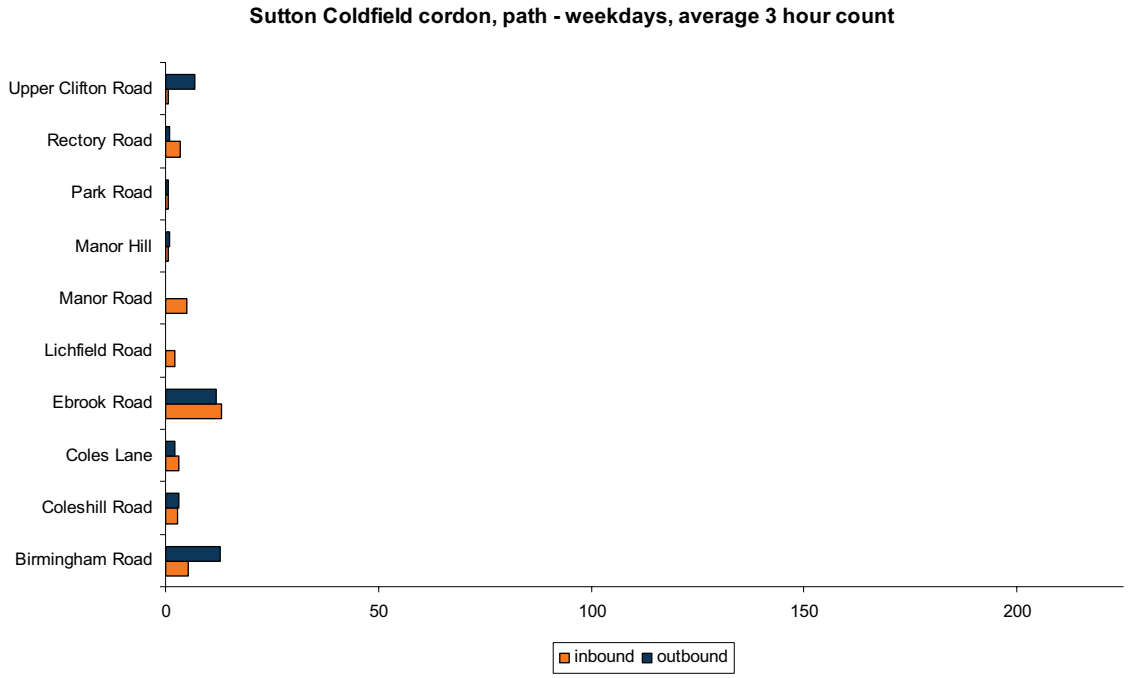


Chart 18: Three hour average counts recorded on Saturdays, Sutton Coldfield road cordon – cyclists on road

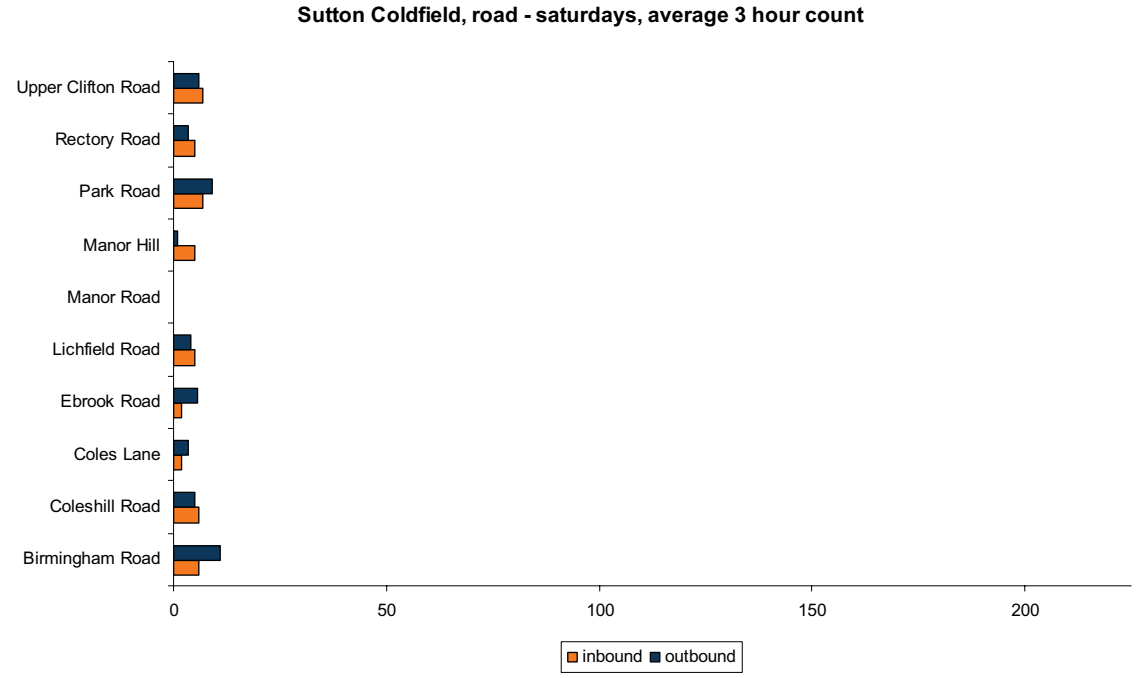


Chart 19: Three hour average counts recorded on Saturdays, Sutton Coldfield road cordon – cyclists on path

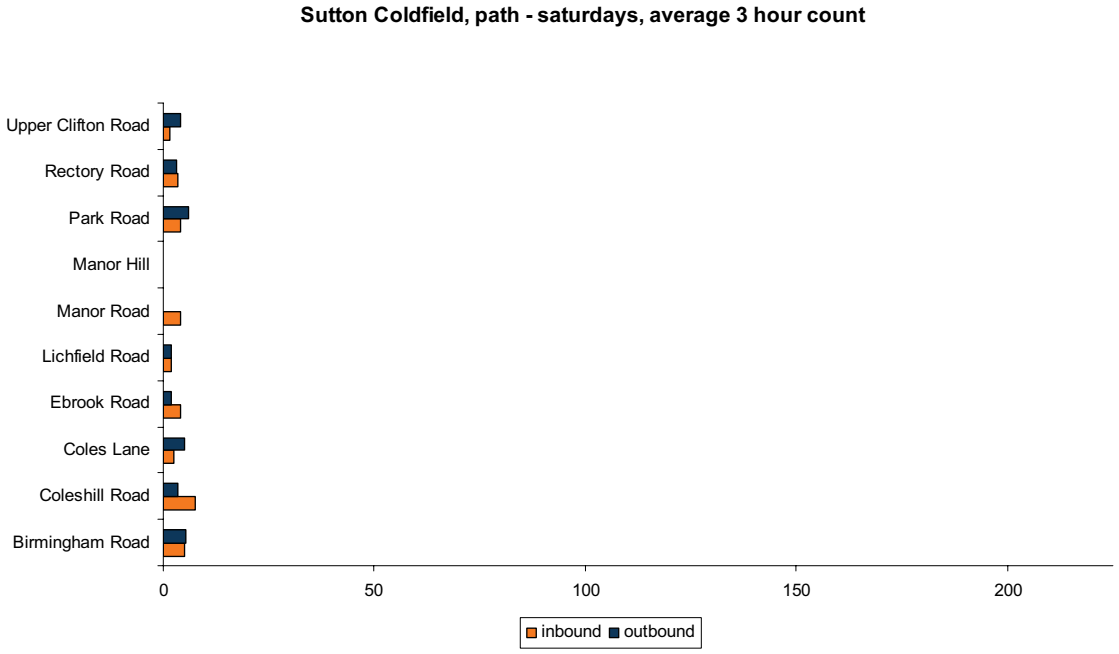
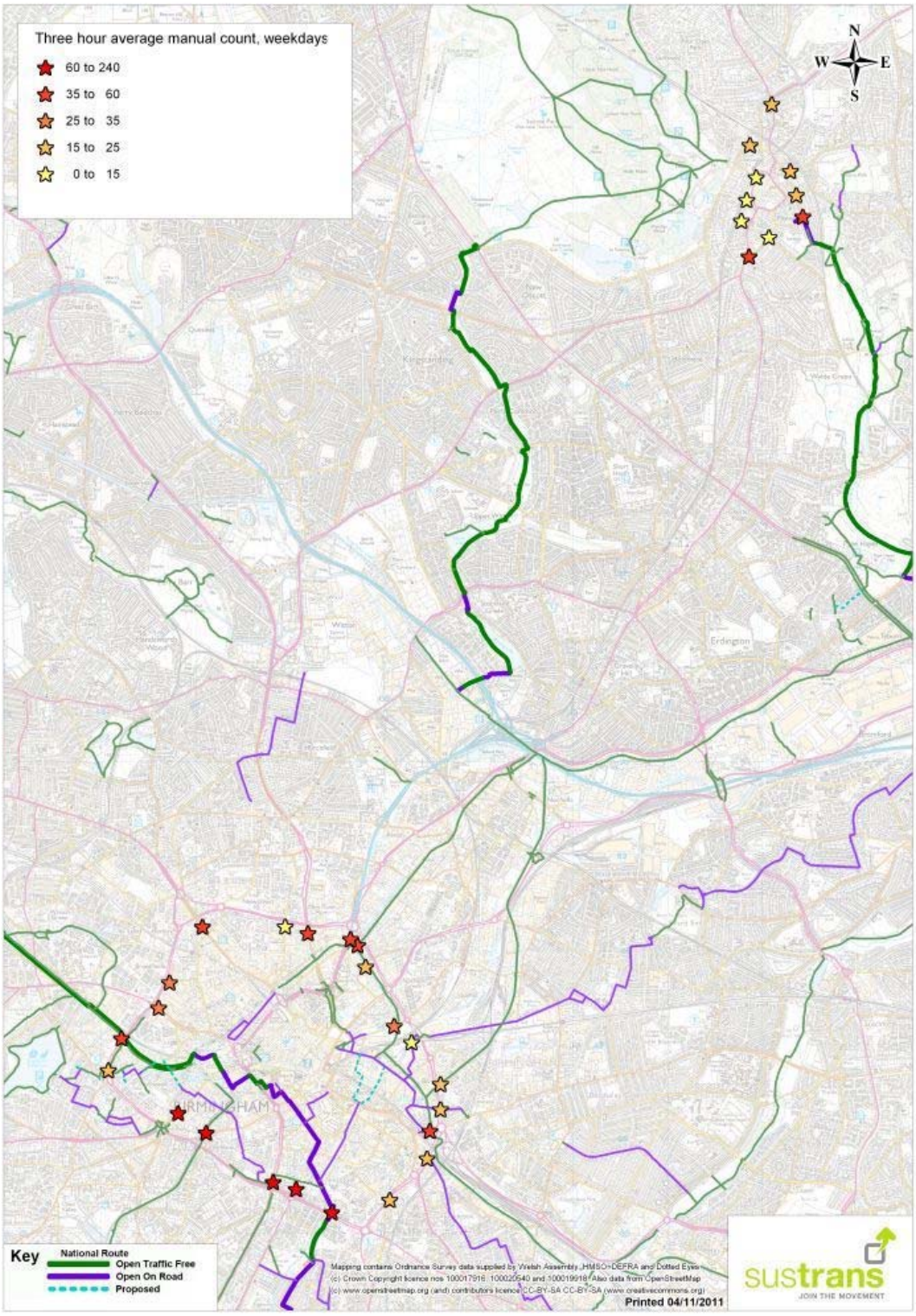


Figure 2: Location of manual count sites


Three hour average manual count, weekdays
60 to 240
35 to 60
25 to 35
15 to 25
0 to 15
N
W
E
S
Key
National Route
Open Traffic Free
Open On Road
Proposed
Printed 04/11/2011
sustrans
JOIN THE MOVEMENT

2.3 Analysis of counts of parked bikes

Key headlines:

- a slight increase in the average count of parked bikes in Birmingham represents an additional five bikes counted at each period
- the highest rate of occupancy of cycle stands is in the city centre where up to 48% occupancy of stands has been recorded
- North of M6 corridor has the lowest rate of occupancy and average count has reduced over the time period.

2.3.1 Introduction

Birmingham City Council conduct counts of cycle stands at 394 different locations across the city. These counts are carried out three times each year, in February, August and October. Each count is conducted during the school holidays to determine a consistent approach to gauging the use of cycle parking infrastructure by commuters. Data from the cycle stands were combined by ward and by geographical corridor. Absolute numbers are presented along with the proportion of the available capacity in each corridor. Additionally we have analysed a subset of count locations that have continuous data from 2006 to 2010. This has enabled us to make a time series comparison using the seasonal Kendall slope estimator method.

2.3.2 Counts of parked bikes and proportion of parking spaces used

Chart 20 below shows the number of bikes counted at cycle stands across the whole of Birmingham. The chart suggests an overall increase in the number of bikes counted but the number of locations (and the number of available stands) that are included in this count increase by about 50% over the duration that data are available. The proportion of available cycle park stands that are occupied is shown in Chart 21. Charts 22 to 27 show the proportion of cycle stands occupied for each corridor.

Chart 20: Cycle stand occupancy in Birmingham

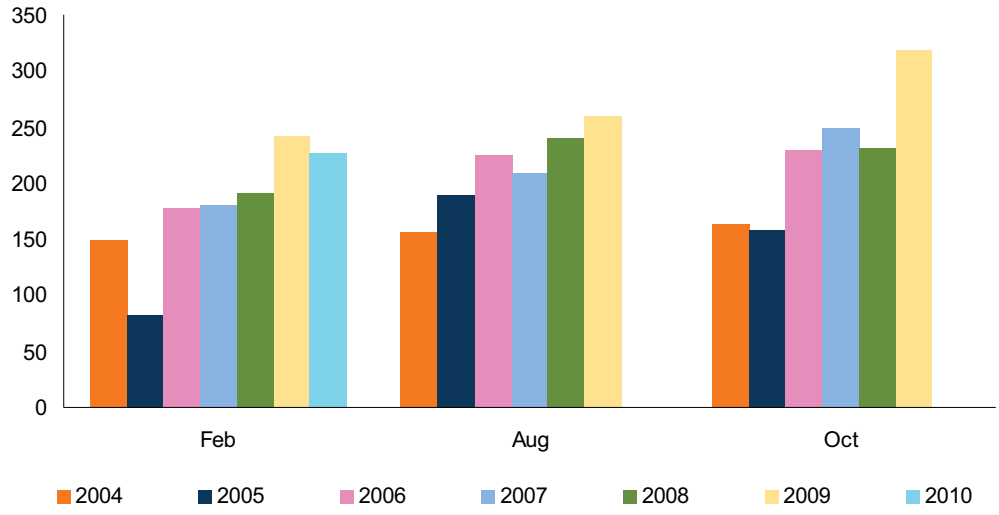
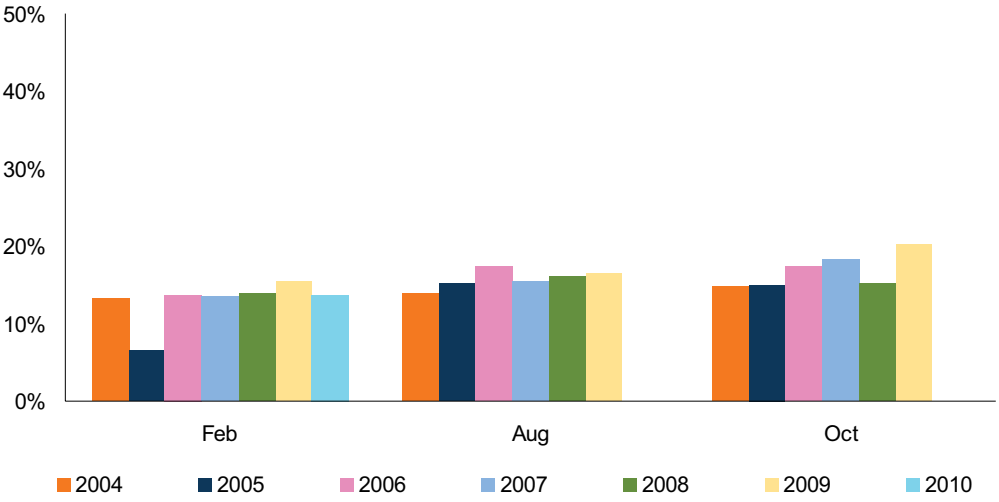


Chart 21: Proportion of cycle stand occupancy – all Birmingham



None of the data suggest a seasonal variance in the numbers of parked bikes counted. If anything there may be a slight tendency for higher counts during October. Although all counts were conducted during the school holidays, the higher October count could be a consequence of increased student numbers in the city; certainly the trend is noticeable in the Moseley, Kings Heath and Birmingham University area as well as the City Centre. The one corridor that does not follow this trend is the area North of the M6, but this is based on relatively low counts and a much smaller sample of cycle parking locations.

Cycle stands in the city centre have the highest rate of occupancy (up to 48%). This peak was observed in October 2009 but occupancy is consistently high throughout the counting period.

Chart 22: Proportion of cycle stand occupancy – City Centre

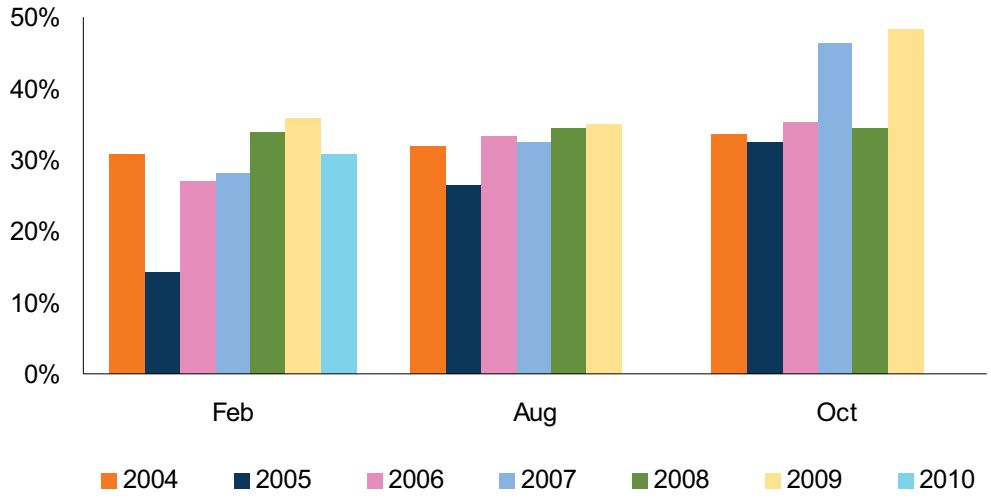


Chart 23: Proportion of cycle stand occupancy – north of M6

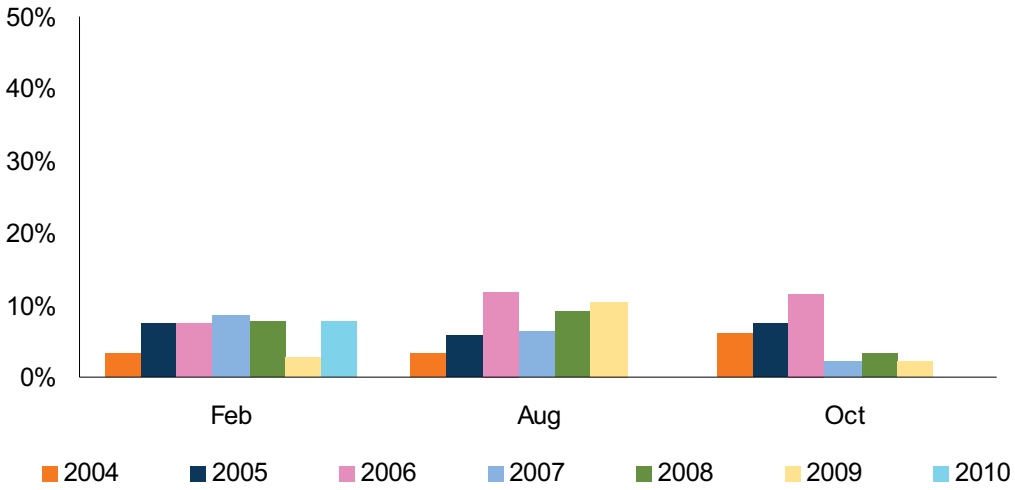


Chart 24: Proportion of cycle stand occupancy – Moseley, Kings Heath and Birmingham University

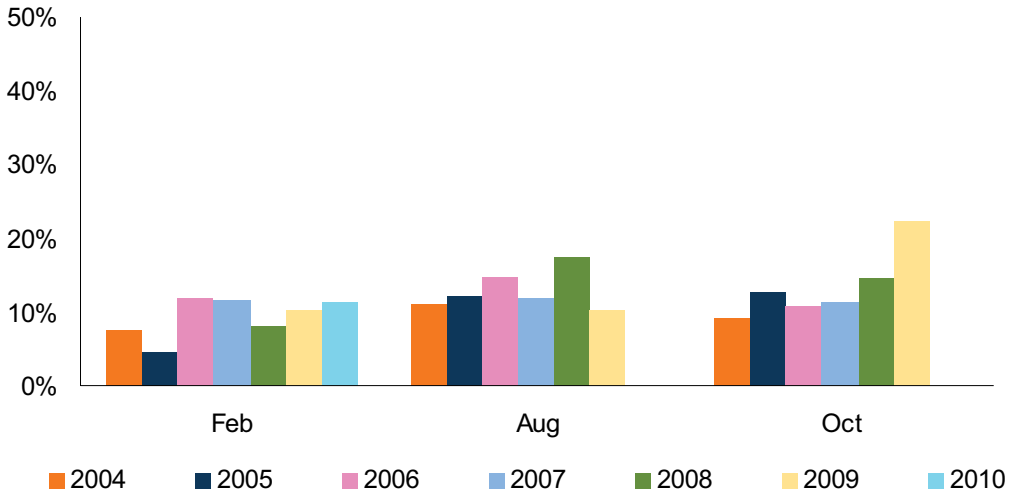


Chart 25: Proportion of cycle stand occupancy – Harborne

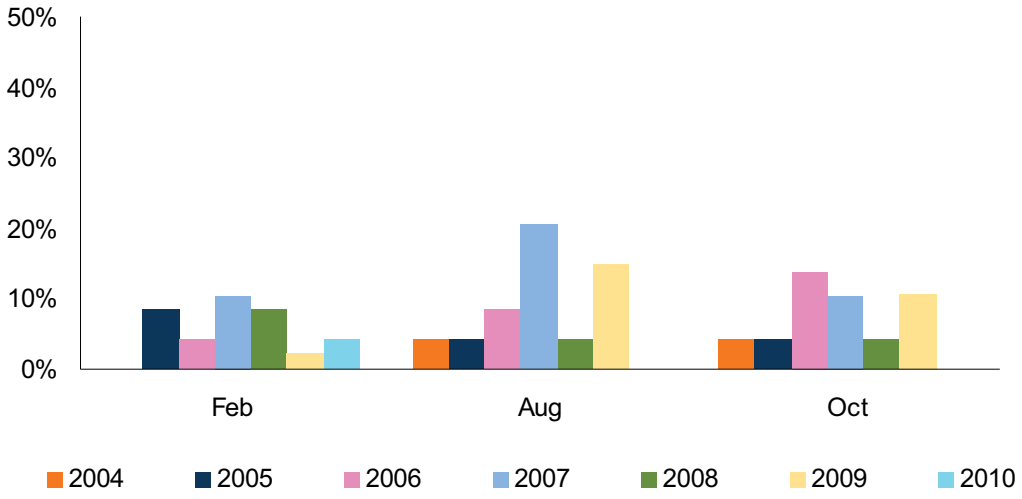


Chart 26: Proportion of cycle stand occupancy – south Birmingham

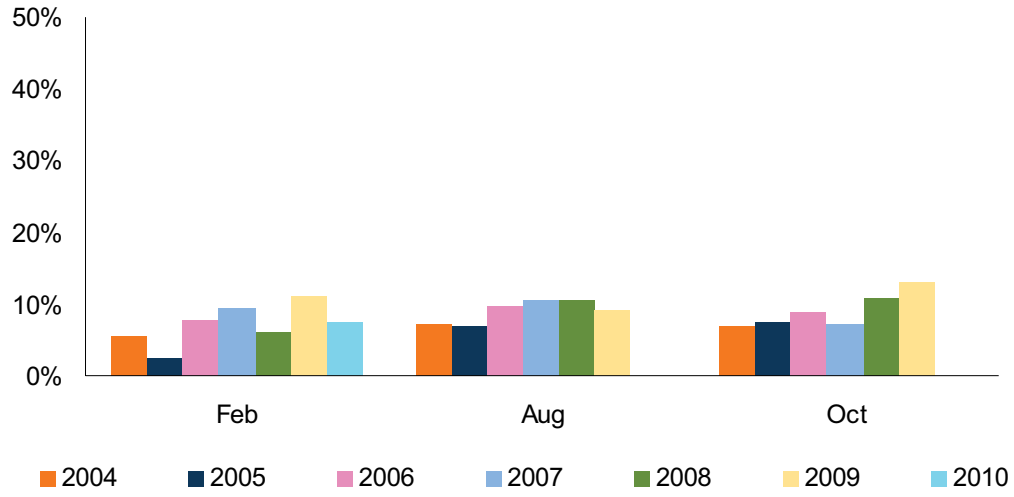
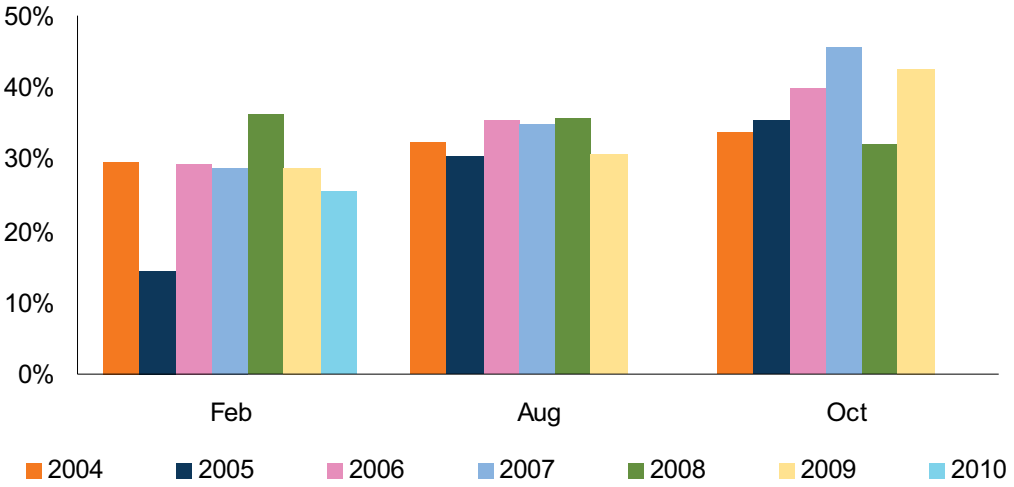


Chart 27: Proportion of cycle stand occupancy – inner city wards



2.3.3 Seasonal Kendall slope estimator

In order to analyse the change over time of the absolute counts it was necessary to use a subset of these data that had continuous results for a significant period; this way we could ensure that comparisons made over time would be consistent in terms of the number of cycle stands and their locations. Counts from 2006 to 2010 were chosen for this purpose and included 300 separate locations across the city.

The average change in numbers of bikes counted between periods (i.e. between each third yearly count) for the whole of Birmingham is five additional bikes. The area that showed the greatest rate of change was south Birmingham, where there was an average change of 5.5 bikes counted

between each counting period. The only area that showed a negative rate of change was North of the M6 (-0.5 bikes between counting periods).

2.4 Counts of parked bikes at railway stations

Key headlines:

- the numbers of cycles recorded parked at railway stations in Birmingham is highly variable
- the greatest number of cycles are recorded at Birmingham New Street and Selly Oak stations
- with the exception of Selly Oak, where the numbers of cycles parked almost doubled between comparable months in 2010 and 2011, there are only modest changes in the volumes of cycles parked at stations between the years for which data are available.

2.4.1 Introduction

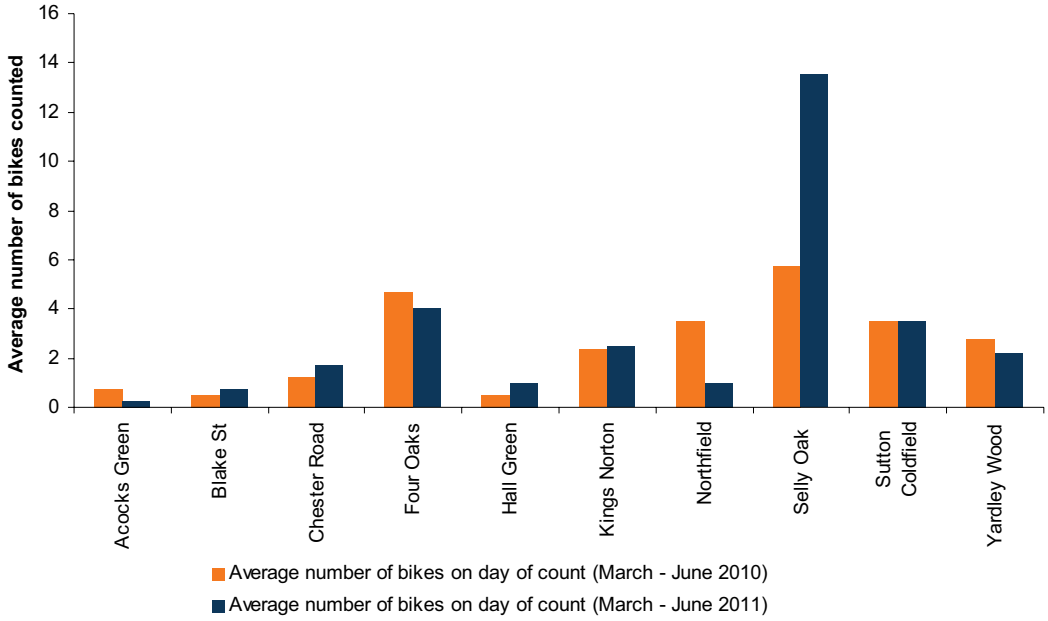
Data have been supplied by Centro for counts of parked bikes at railway stations across the Centro PTE area for the period March 2010 to June 2011. Counts are performed on every third Thursday of the month. The quantity of data varies between years for the sites recorded. A total of 32 railway stations were identified as being in the Birmingham district area. Of these, ten stations had data directly comparable, collected in March, April, May and June 2010 and 2011.

2.4.2 Analysis

The total number of cycles counted at each location is highly variable. Of the 20 locations for which data are available from counts performed in June 2011, only two sites had more than seven cycles recorded. The greatest numbers of cycles recorded were at Selly Oak and Birmingham New Street railway stations (14 and 24 cycles, respectively)

For the four months that could be compared directly across the two years, the average number of bikes across those four months was calculated for 2010 and 2011, as presented in Chart 28. Generally, there are only modest changes in the numbers of cycles counted, with the excepted of Selly Oak where the average count of parked cycles across the four months double between 2010 and 2011.

Chart 28: Average number of bikes parked on the third Thursday of the month, March – June



2.5 Analysis of Accident data

Key headlines:

- there has been a very slight decrease in the number of accidents involving cyclists in Birmingham
- over the period analysed, the overall level of accidents involving cyclists in Birmingham has decreased, while England results as a whole have increased
- serious injuries have increased over the time period, and at a greater rate than in England as a whole.

2.5.1 Introduction

The primary source of data for accident analysis is the STATS19 record, created by the police when road traffic accidents are reported to them. Whilst we have relied on this data source in the present analysis, we acknowledge that there are some limitations with the STATS19 record; accidents may be under-reported because the police are not always informed, and if an accident is reported to the police as having lead to injury, the severity of the injury may not be accurately reported.

Due to the relatively rare occurrence of cycling accidents, data are usually required for a three year period before and after an intervention in order to make any statistically significant inferences about the effect of an

intervention. Frequently, when the type of accident being considered has a very low occurrence rate, a period of five years is used.

2.5.2 Analysis

Overall accident levels

Data on cycling accidents received from Birmingham City Council are provided in the appendix to this report. Table 7 below summarises the total number of cycle accidents for the five year periods 2001- 2005 and 2006 – 2010, split by accident severity.

Table 7: Total accidents, 2001-2005 and 2006-2010

Severity of accident	2001-2005	2006-2010
Killed	2	8
Seriously injured	115	167
Slightly injured	1090	1001
All accidents	**1207**	**1176**

The significance of the change between these time periods has been assessed against the null hypothesis that there is no change in the total number of cycle accidents. Comparing the calculated test statistic for all accidents to χ^2 with one degree of freedom and testing at the 5% level of significance, shows no significant change in the total number of cycle accidents. The increase in the number of accidents that resulted in somebody being reported as seriously injured from 115 to 167 is statistically significant.

When comparing these data against the whole of England, it was necessary to use periods of three years for comparison; STATS19 data are available from 2005 to 2010[1]. Table 8 summarises the percentage change of cycle accidents recorded during the three year periods of 2005 to 2007 and 2008 to 2010.

Table 8: Percentage change in accidents, 2005-2007 and 2008-2010

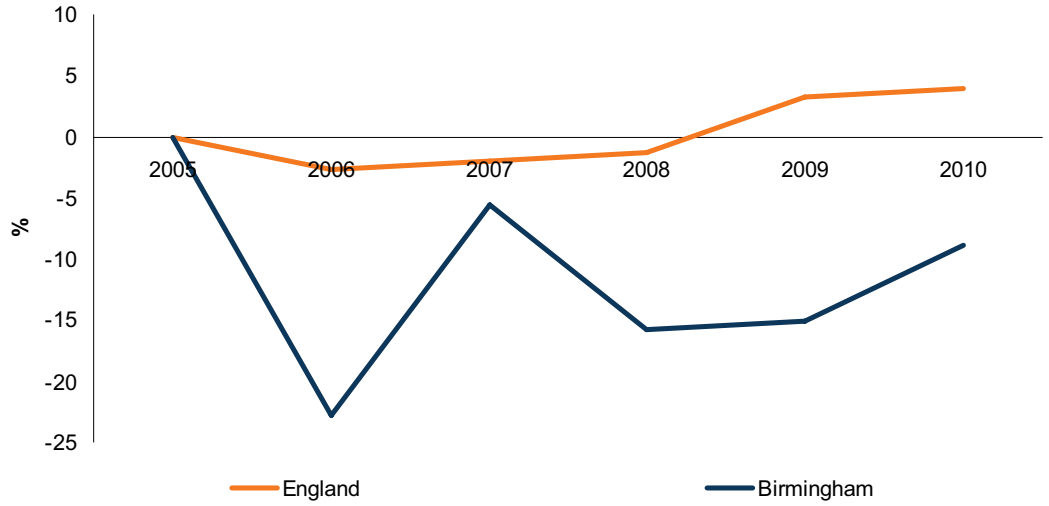
	Number of incidents, Birmingham		% change in incidents between 2005-2007 and 2008-2010	
Severity	2005-2007	2008-2010	Birmingham	England
Killed	4	4	0%	-23%
Seriously injured	74	114	+54%	+11%
Slightly injured	661	590	-11%	+3%
All accidents	**739**	**708**	**-4%**	**+4%**

[1] Note that for the sake of accurate comparison, when comparing Birmingham data with the rest of England, we have used results from the STATS19 database and not those provided by Birmingham City Council. This may result in some minor inconsistencies with the previous tables but not enough to affect any conclusions.

Although the overall number of accidents was lower for the period 2008-2010 compared to 2005-2007, the number of serious injuries has risen. The figures for people killed or seriously injured are likely to experience greater fluctuation, however, due to the much lower incidence rates compared to England as a whole. Furthermore, any change in absolute accident levels is set against a growth in cycling in the city over time. Whilst the number of serious accidents involving cyclists has increased between the two time periods considered, the overall levels of cycling have also increased over time, and more substantially so. Any accident involving a cyclist is a matter to be taken very seriously; however, the change in the accident rate over time does not mirror the greater uplift in overall cycling levels suggested by the cycle count data. Over the past ten years in Birmingham there has been an average of one fatality per year relating to a cycling accident and 28 serious injuries.

Chart 29 below shows the percentage change in all accidents since 2005. Unsurprisingly there is greater fluctuation in the Birmingham data compared to the England average because of the much smaller number of accidents involved but broadly speaking the level of accidents in Birmingham decreases at a greater rate than in England between 2005 and 2008 and then follows a similar upward trend.

Chart 29: Percentage change in all accidents since 2005



By Corridor

Analysis of the data in each of the geographical corridors in Birmingham did not identify any significant changes in the accident rate. Some areas show a slight increase and others a slight decline. The greatest number of accidents were recorded in South Birmingham, but this is a much larger geographical area than the other corridors analysed. Further analysis of the accident rates could be performed if the level of cycling for each area was available. Tables for the accident rate for each corridor are provided in the appendix to this report.

By time of day

The change in the number of accidents that occur during commuting times was also tested. Table 9 below summarises the total number of accidents for the five year periods 2001 to 2005 and 2006 to 2010 that occurred during commuting times[2]. There was a slight increase in the number of accidents recorded as resulting in serious injury and a slight decrease overall. Neither change was found to be significant at the 5% level.

Table 9: Total accidents in commuting periods, 2001-2005 and 2006-2010

Severity	2001-2005	2006-2010
Killed	1	2
Seriously injured	52	73
Slightly injured	448	383
All accidents	**501**	**458**

[2] Commuting times are taken to be between 07:00 – 09:00 and 16:00 – 18:00

3 Cycling to school in Birmingham

Pupil Level Annual School Census (PLASC) data suggest a very modest increase in the proportion of children who cycle to school in Birmingham. Cycling levels are slightly higher in secondary schools than in primary schools but both represent a very modest proportion compared to the England average. Bike It schools generally have higher levels of children who cycle to school and show a significant increase in the rate of cycling after the intervention.

Key headlines:

- 0.4% of pupils cycle to school in Birmingham according to 2010 PLASC data. This is part of a very slight upward trend
- levels of cycling to school are highest in the Moseley, Kings Heath and Birmingham University area and lowest in the city centre
- in schools that are part of Bike It, the proportion of children who cycled to school in 2010/11 increased from 2.8% to 9.3% following the intervention
- an automatic cycle counter at Ladywood was installed to monitor the Links to School scheme in the area. There are indications that this route is more heavily used during school commuting times.

3.1 Introduction

PLASC mode of travel data have been provided by Birmingham City Council for the years 2007 to 2010. Additionally, Sustrans have conducted hands up surveys as part of the Bike It programme. Bike It data are available from September 2008 to July 2011. Analysis has been conducted on both of these datasets to demonstrate the levels of cycling by children to school.

Data are collected on an individual pupil level for each school in Birmingham, recording how children travel to school. School data have been combined by ward and further by geographical corridors. The corridors have been selected to represent distinct areas of interest within Birmingham. The wards that have been included in each corridor are listed in Table 10:

Table 10: Geographical corridors in Birmingham

Corridor	Wards
City centre	Ladywood, Nechells
Area north of the M6	Kingstanding, Oscott, Sutton Four Oaks, Sutton New Hall, Sutton Vesey
Moseley, Kings Heath and the University area	Moseley and Kings Heath, Selly Oak, Springfield
Harborne and Quinton	Harborne, Quinton
South Birmingham	Acocks Green, Bartley Green, Billesley, Bournville, Brandwood, Edgbaston, Hall Green, Harborne, Kings Norton, Longbridge, Moseley and Kings Heath, Northfield, Quinton, Selly Oak, Sheldon, South Yardley, Sparkbrook, Springfield, Weoley
Inner city areas	Aston, Ladywood, Handsworth Wood

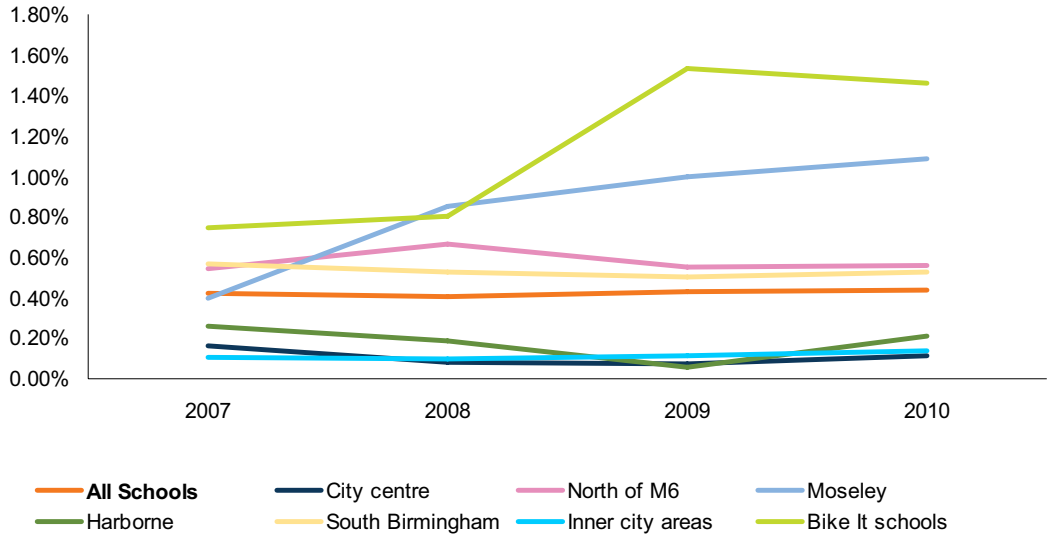
3.2 PLASC data analysis

3.2.1 General levels of cycling to Birmingham schools

Chart 30 below shows the percentage of children who reported that they cycled to school between 2007 and 2010. There is a negligible increase in the levels of cycling during this period but overall levels are very low; the city wide average response for children cycling into school in 2010 is just 0.4% compared to an England average of 1.9%.

Chart 30 also presents separately PLASC data for the subset of schools in Birmingham that have participated in Bike It. According to PLASC data, Bike It schools have had a higher percentage of school children reporting cycling to school than the average for Birmingham. The reported level of children cycling to school in Birmingham rose from 0.8% to 1.5% between 2007 and 2010 with much of this increase coming between 2008 and 2009, when Bike It first started engaging with Birmingham schools.

Chart 30: Cycling trends in Birmingham schools



3.2.2 Cycling to primary and secondary schools

Charts 31 and 32 below show the percentage of primary and secondary school children who reported that they cycled to school. Again, it is possible to see a very slight rise in the levels of cycling but from a very low base. The level of primary school children cycling to school across all of Birmingham rose from 0.34% to 0.37% and remained at 0.6% for secondary school children. This should be viewed in the context that Birmingham's levels of cycling to school are lower than the England average. For comparison, the England average for children cycling to school in 2010 was 1.0% to primary schools and 3.1% for secondary schools.

Chart 31: Cycling trends in Birmingham primary schools

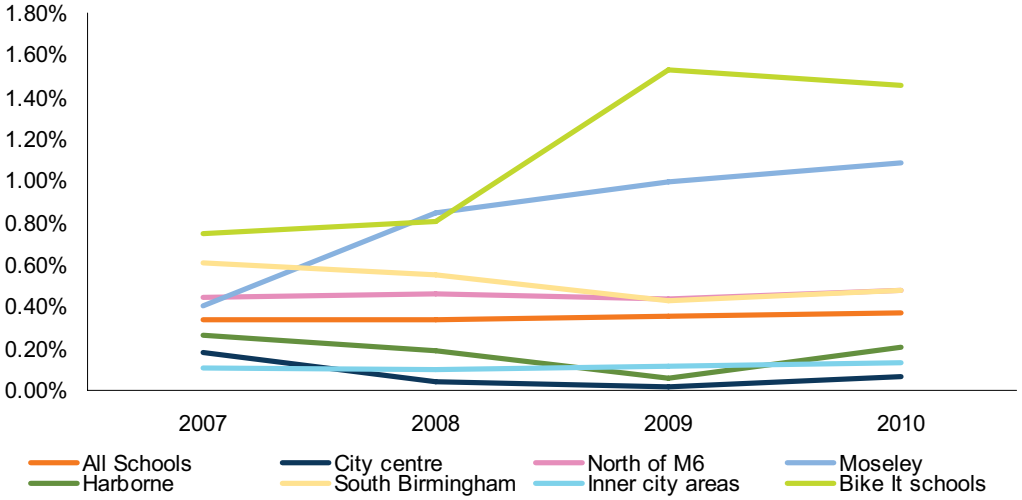
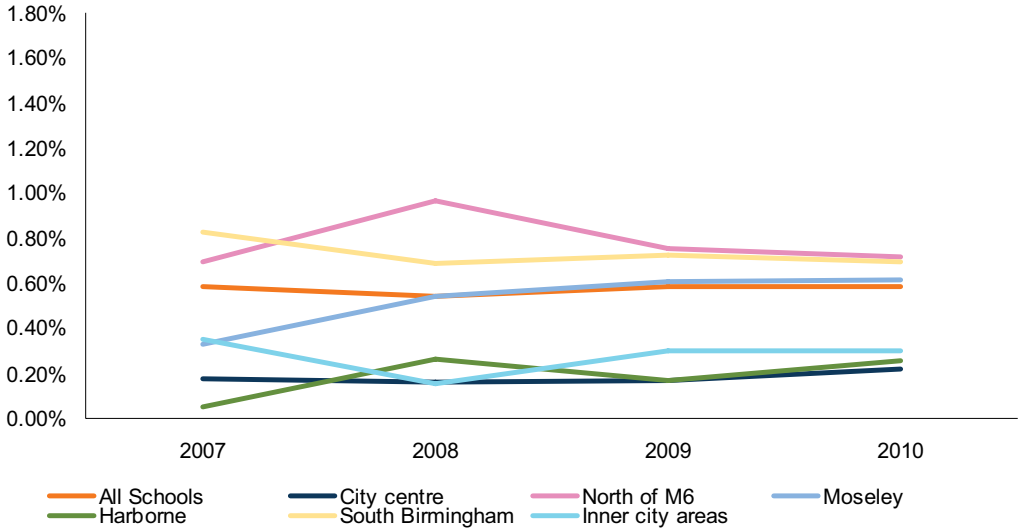


Chart 32: Cycling trends in Birmingham secondary schools



Other factors that may have an influence on the levels of cycling in Birmingham schools include the choice of travel by other modes. Unsurprisingly the level of children who travel by bus to school is much higher for secondary school children than for primary school children (30% compared to 3%). The most common mode of travel for both primary and secondary school children, however, is to walk. The proportion of children walking to school has risen slightly to 62.5% for primary schools and to 44.6% for secondary schools. Mode of travel to school is presented in Chart 33 for primary schools and Chart 34 for secondary schools in Birmingham.

Chart 33: Mode of travel to primary school in Birmingham

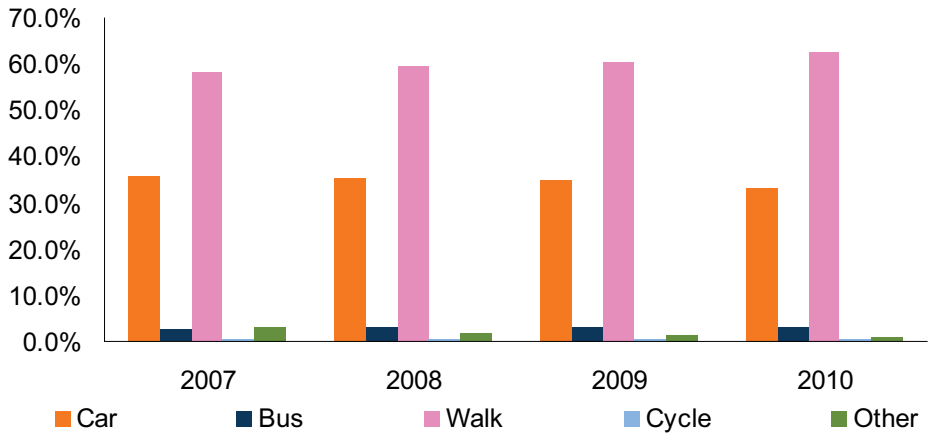
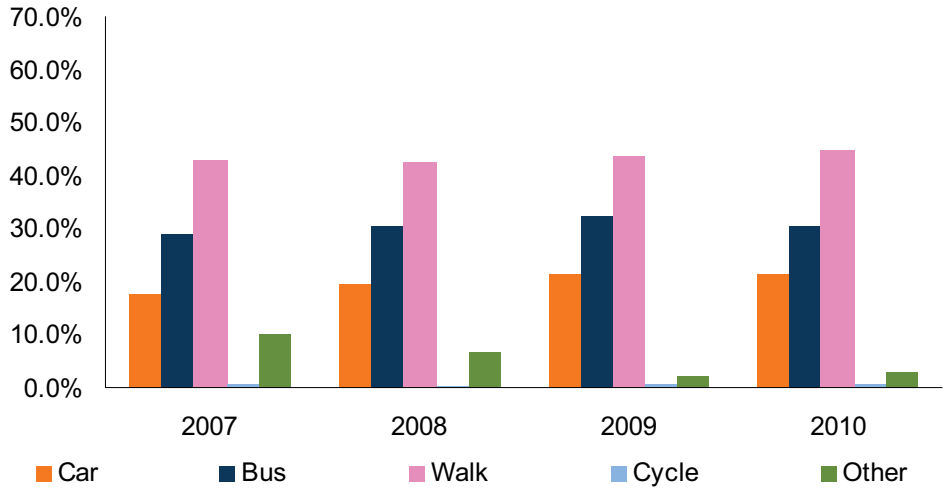


Chart 34: Mode of travel to secondary school in Birmingham



3.2.3 Cycling to school by geographic corridors

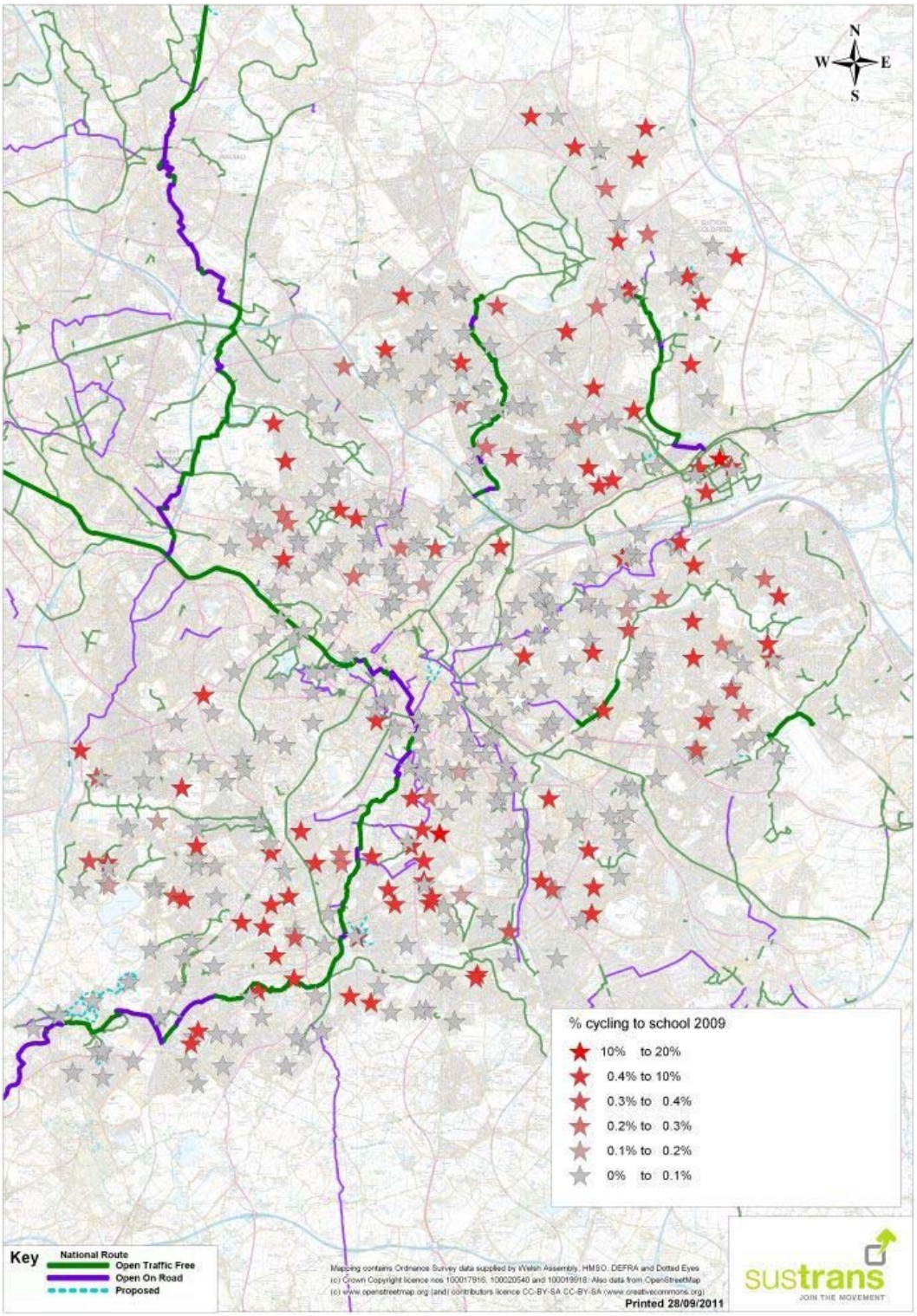
The area showing the greatest levels of children cycling in 2010, and the greatest rise in levels of cycling over the period is the Moseley, Kings Heath and Birmingham University area. The percentage of children cycling to school in this corridor has risen from 0.4% to 1.1% since 2007. The areas of Birmingham with the lowest levels of cycling in 2010 are the city centre and the inner city areas, both of which report levels of 0.1%.

The city centre, inner city and Harborne/Quinton corridors are below the Birmingham average for both primary and secondary schools. Less than 0.1% of city centre primary school children cycle to school and only 0.2% of secondary school children cycle.

The one noticeable observation in Chart 31 is the increase in the level of children cycling to primary school in the Moseley, Kings Heath, Birmingham University corridor, rising from 0.4% in 2007 to 1.1% in 2010. Schools in wards north of the M6 as well as in South Birmingham also showed rates of cycling above the average for Birmingham for both primary and secondary schools.

Figure 3 below plots the levels of cycling to school on a map of Birmingham. There is some suggestion from this map is that much of central Birmingham has the lower levels of cycling and it is the peripheral regions where cycling to school is most common.

Figure 3: Map of schools in Birmingham and the percentage of children who cycled to school in 2009



3.3 Bike It hands up surveys

The PLASC data analysis above demonstrated that schools that have engaged with the Bike It programme have higher levels of children cycling to school than average. In addition to the PLASC data, Sustrans Bike It officers conduct hands up surveys in the schools in which they are working. These surveys are carried out at the beginning and end of the academic year to compare levels of cycling before and after the intervention. Since 2008, 24 schools in Birmingham have been engaged in Bike It. Data from pre programme surveys (performed in September) and post intervention programmes (performed in July, at the end of the first academic year of engagement) performed in 19 schools are summarised in the following sections.

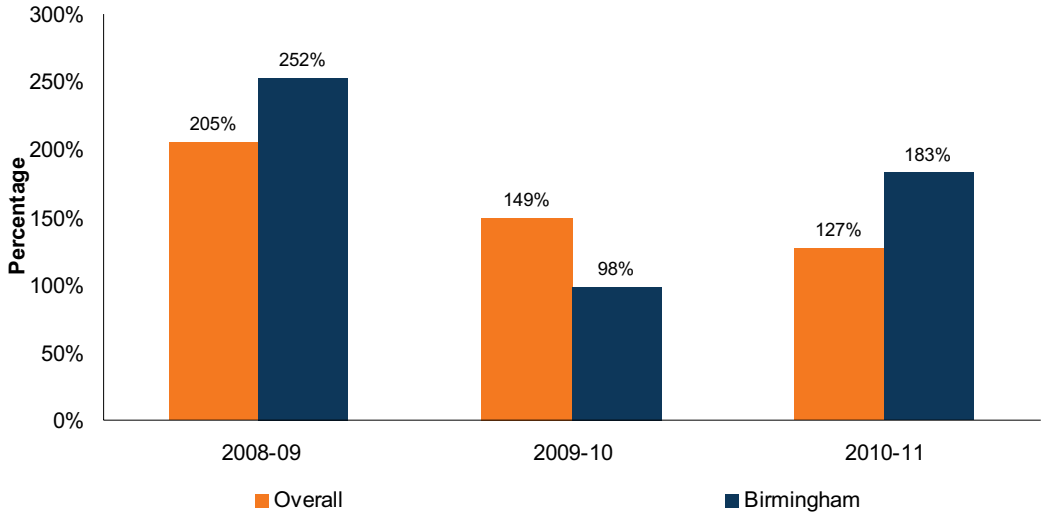
Table 11 below reports the percentage of children who cycled to school on the day of the survey in the pre and post intervention surveys. The difference in the baseline count when compared to the PLASC data from the same school might be due to differences in the time of year that the data are collected.

To compare the levels of cycling in Birmingham with the rest of the country, the national average Bike It hands up data are also provided in Table 11, indicating that cycling levels are generally lower in Birmingham schools participating in Bike It than has been found in Bike It schools in other areas. Chart 35 shows the relative percentage change in the proportion of pupils cycling to school on the day of the survey. Although the relative change is less in Birmingham than across the programme as a whole in the 2009/10 academic year, in 2008/09 and 2010/11, there is a greater relative increase in the proportion of children travelling to school by bike on the day of the survey than for schools engaged in Bike It elsewhere in the country.

Table 11: Pupils cycling to school on the day of the survey (Bike It hands up)

	Birmingham pre	Birmingham post	Programme wide pre	Programme wide post
2008-09	2.3%	8.1%	4.1%	12.5%
2009-10	3.3%	6.4%	4.3%	10.7%
2010-11	2.3%	6.5%	4.5%	10.2%

Chart 35: Relative percentage change of children cycling to school following Bike It intervention



Hands up surveys also ask children how often they cycle to school. Regular cyclists are considered as those who cycle once or twice a week or more. Chart 36 below, shows the percentage of pupils who responded that they regularly cycle to school for each of the three years of Bike It in Birmingham. Again the relative percentage increase (shown in Chart 37) is greater than the England Bike It average in each of the three years.

Chart 36: Percentage of pupils cycling regularly to school (Birmingham Bike It hands up)

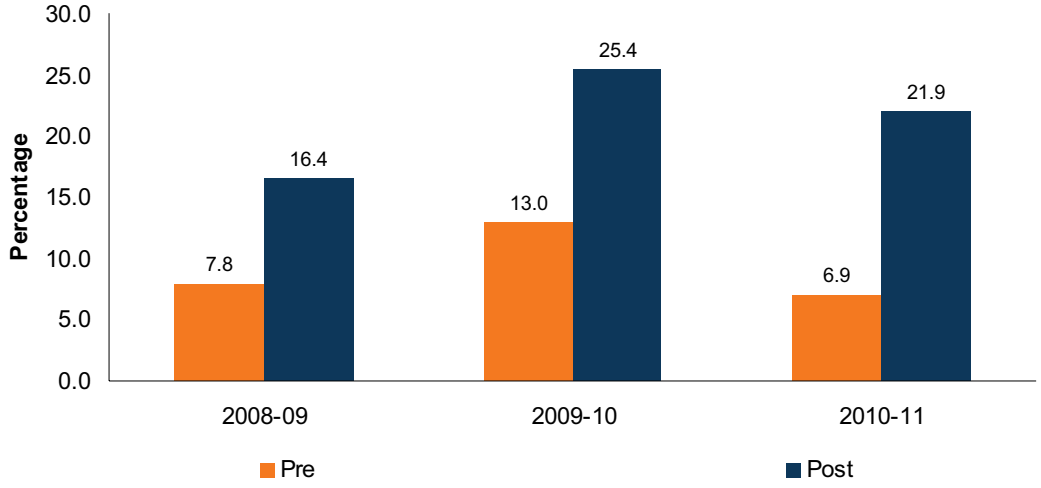


Chart 37: Relative percentage increase in pupils cycling regularly during the year

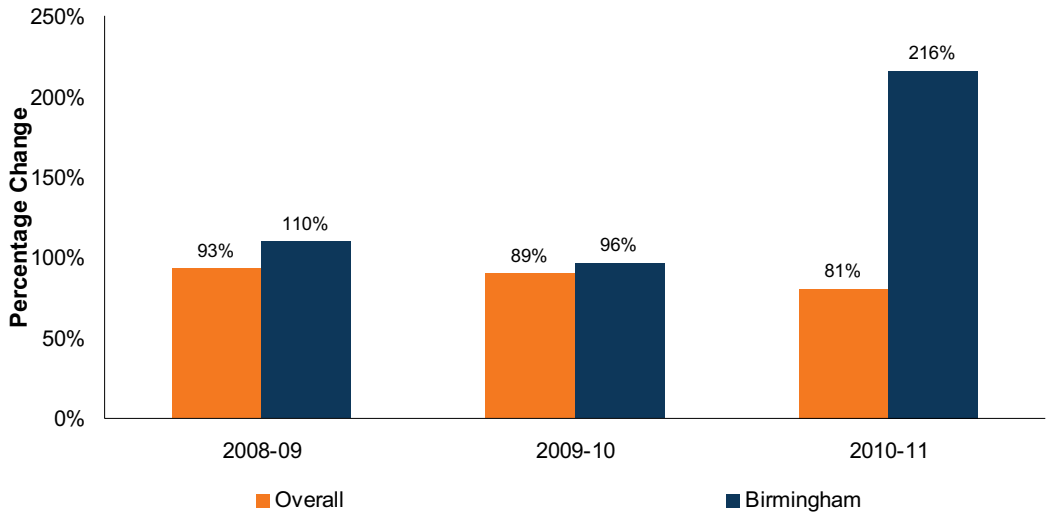
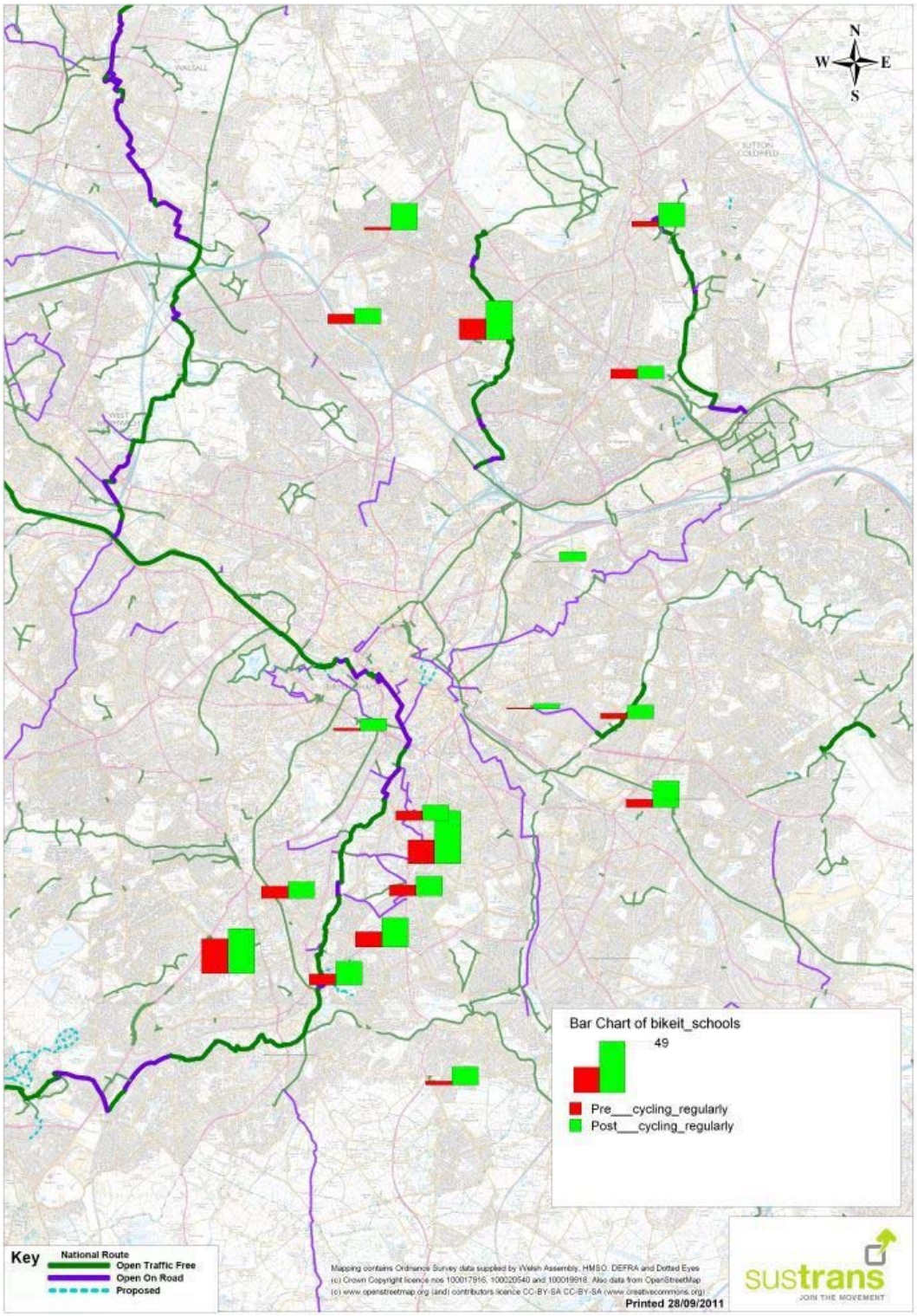


Figure 4 below plots the Bike It schools on a map of Birmingham and shows the levels of cycling before and after Bike It. Most of the schools that are currently working with Bike It are to the south of the city. While all of the schools show an increase in children who regularly cycle, some of the schools that are further from the city centre have seen a larger increase from a lower base rate.

Figure 4: Bike It schools on a map of Birmingham showing the percentage of regularly cycling to school before and after Bike It interventions

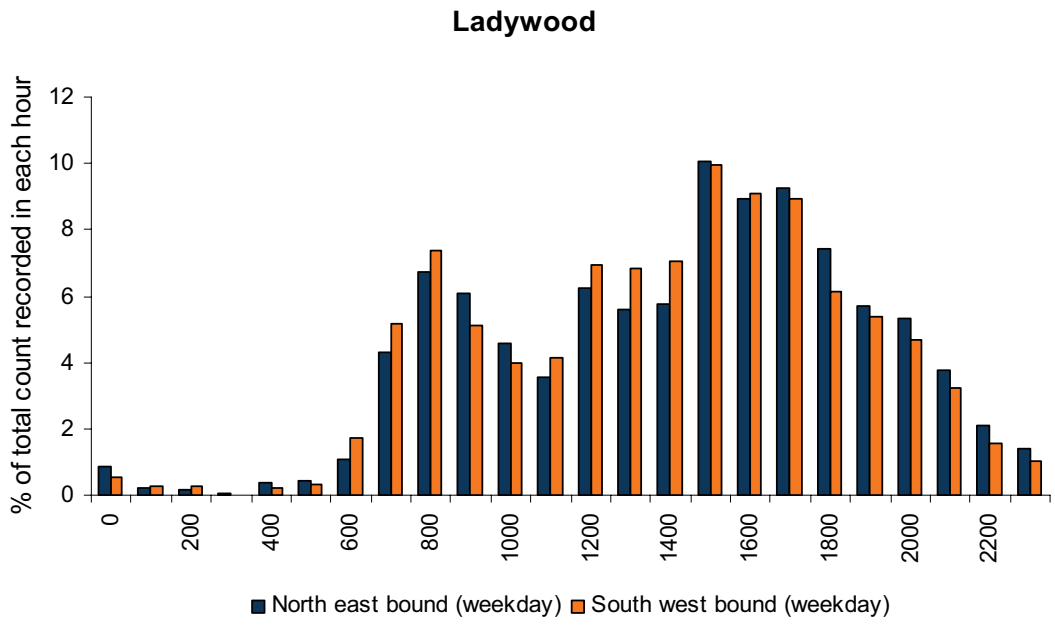


3.4 Automatic cycle counter data

An automatic cycle counter was installed in Ladywood to monitor the Links to School scheme. Data are only available from this location from February 2011 onwards. Analysis of data available to date indicates a higher level of cycling on weekdays (an average daily count of 63) compared to weekend days (an average daily count of 42).

The distribution of counts across the day is similar for both directions monitored by this counter. Whilst the morning and afternoon peaks in the counts of cyclists are not conclusive, there is an increase in the volumes of cyclists recorded on weekdays around 8am and in the afternoon, from 3pm onwards as presented in Chart 38, suggesting that this counter may be recording cycle journeys to school.

Chart 38: Hourly distribution of counts recorded on weekdays – Ladywood



4 Commuting and leisure cycling in Birmingham

Counts of cyclists, together with surveys and other data suggest greater levels of cycling to work in some areas of Birmingham than in others, whilst other data sources suggest a predominance of leisure cycling.

Key headlines:

- several automatic cycle counters show distinct peaks in the volumes of cyclists recorded in the morning and afternoon, at the times of day typically associated with commuting to work. Weekend day data do not exhibit such peaks in the volumes of cyclists recorded
- growth in the volumes of cyclists recorded over time by a number of automatic cycle counters is associated particularly with commuting times
- the majority of automatic cycle counters in Birmingham record greater numbers of cyclists on weekdays than on weekend days
- this trend is not always consistent over time – two counters show an increase in the average weekday count over time to levels greater than the weekend day average when the weekend day average was greater than the weekday average in the early part of the time series
- intercept surveys of route users at two locations indicate a very high proportion of leisure trips (>85%) – data from automatic counters located near the survey sites reflect this finding
- analysis of data on mode of travel to work collected in the 2001 Census indicate the proportions of people travelling to work in the city centre by bike to vary considerably between areas.

4.1 Introduction

In this section we review the data sources presented in the overall analysis section in the context of functional (specifically, commuting to work) and leisure cycling. Data from automatic cycle counters, intercept surveys of route users and citywide data on the mode of travel to work are examined in order to build a picture of the different types of cycle trips being made, the predominance of particular types of trip in different parts of Birmingham, and the balance between commuting and leisure cycling.

4.2 Automatic cycle counter data

4.2.1 Hourly variation in automatic cycle counter data

Count data alone cannot be used to distinguish commuting from leisure journeys with certainty, but an analysis of the diurnal pattern of counts, and growth in counts recorded at different times of day can indicate where cycle journeys are concentrated at the times of day typically associated with journeys of a particular type.

Individual analyses for each of the eight automatic cycle counters for which data are available are presented in an earlier section of this report (section 2.1). Analysis of the diurnal distribution of weekday counts indicates a peak of counts recorded in one direction in the morning, countered by a similar volume of counts recorded in the opposite direction in the afternoon, at times consistent with the commute to work for the counters located on Pershore Road and the Rea Valley Cycleway (to the south of the city) and the Birmingham and Fazeley Canal (to the north of the city).

Chart 39: Hourly distribution of counts recorded on weekdays – Pershore Road, Footpath

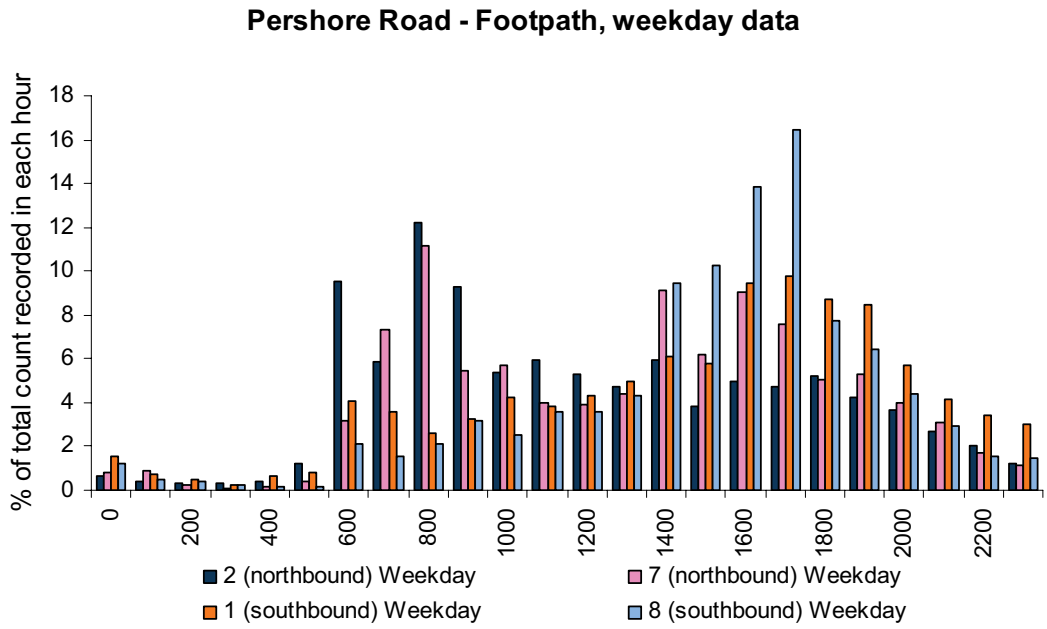


Chart 40: Hourly distribution of counts recorded on weekdays – Pershore Road, Road

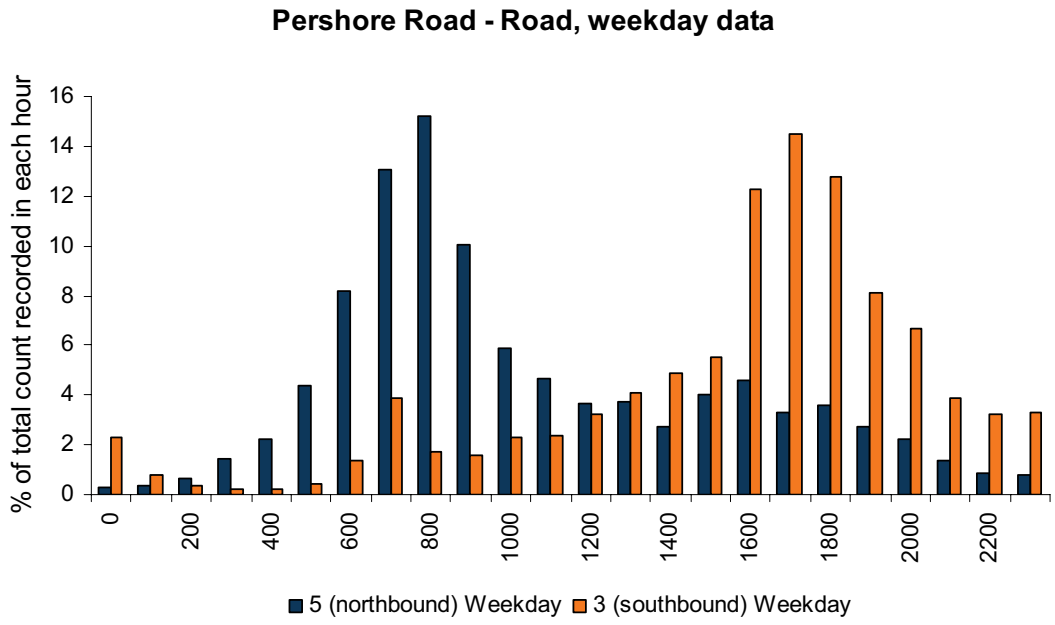


Chart 41: Hourly distribution of counts recorded on weekdays – Birmingham and Fazeley Canal

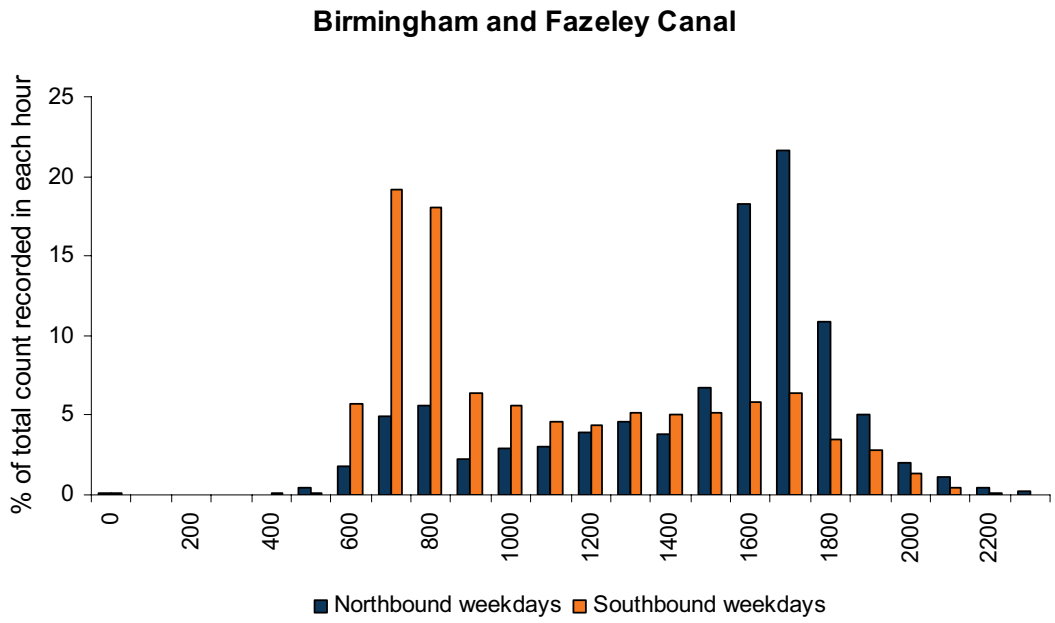
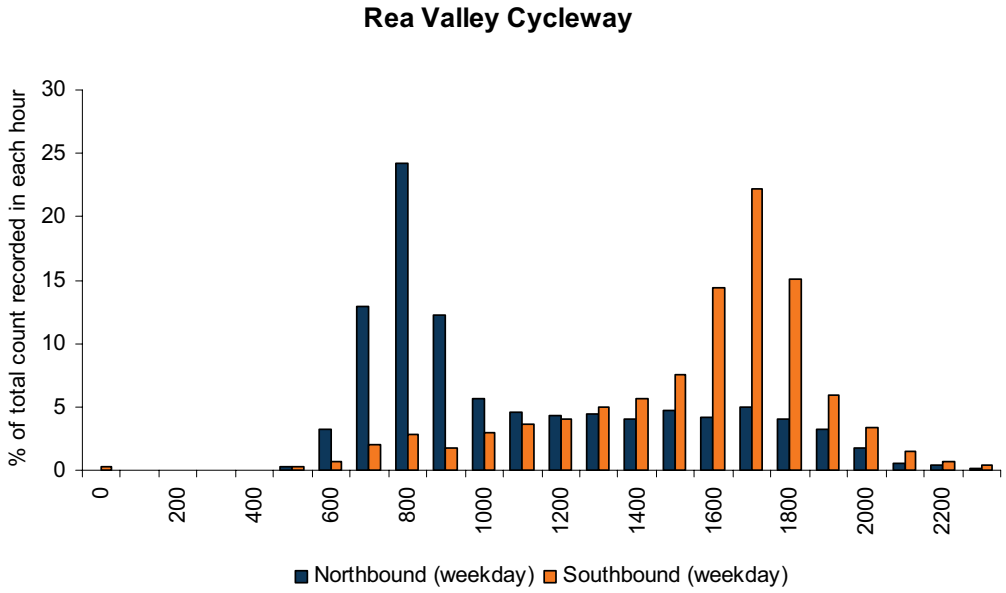


Chart 42: Hourly distribution of counts recorded on weekdays - Rea Valley Cycleway



In contrast, counters located in Sheldon Country Park, Newhall Valley Country Park, at Hazelwell Road and Ladywood record peaks in cycling activity around the times typically associated with commuting journeys, with similar volumes of counts recorded in both directions monitored by the counter – suggesting their location on routes serving trips in multiple directions. The

counter at Ladywood is located close to a school. The afternoon peak in counts occurs at 3pm – earlier than the other counters considered in this analysis, and suggesting that this counter is capturing some journeys to school by cycle.

Chart 43: Hourly distribution of counts recorded on weekdays – Sheldon Country Park

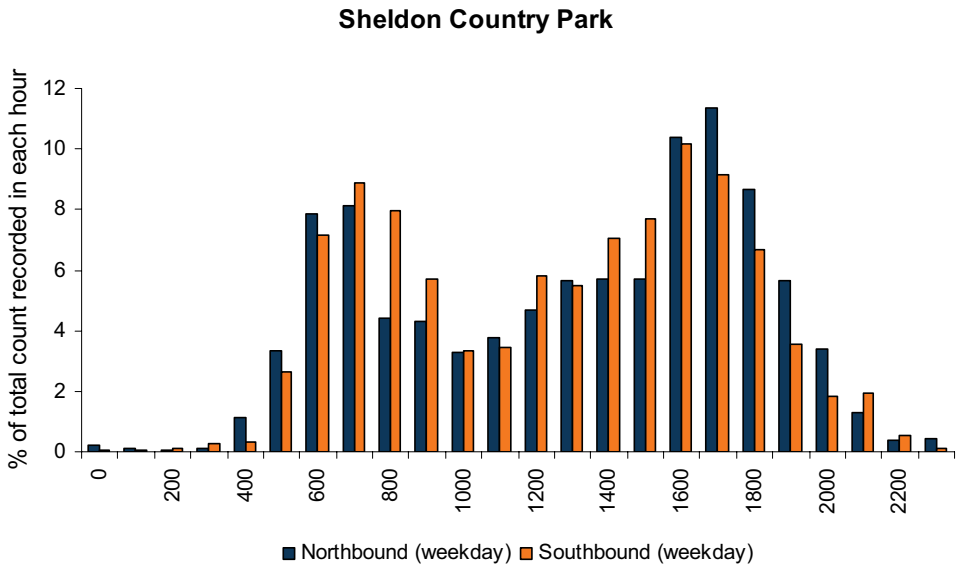


Chart 44: Hourly distribution of counts recorded on weekdays – Newhall Valley Country Park

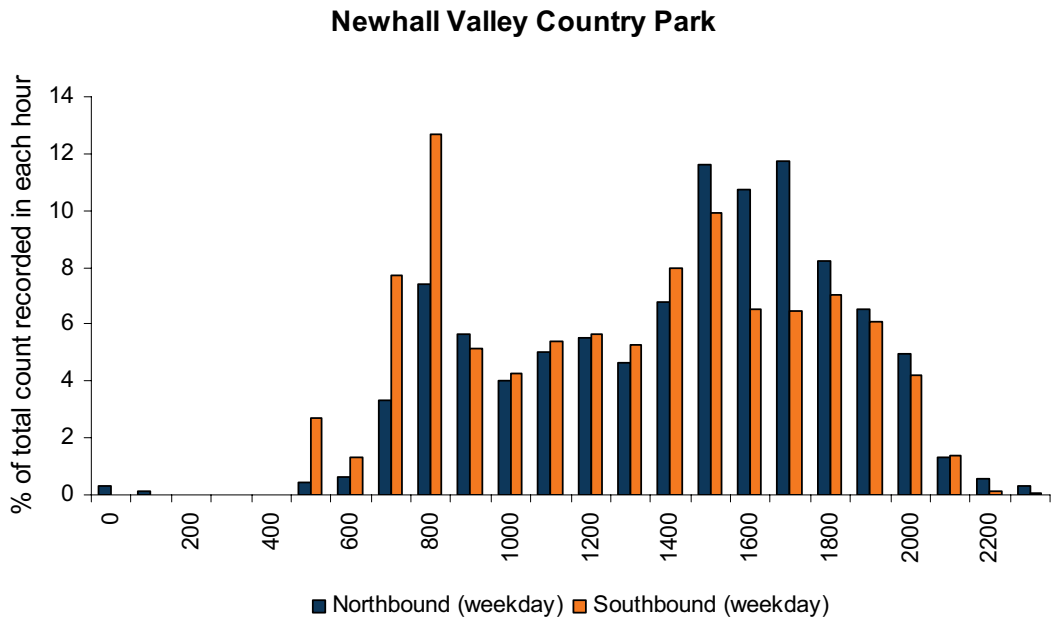


Chart 45: Hourly distribution of counts recorded on weekdays – Hazelwell Road

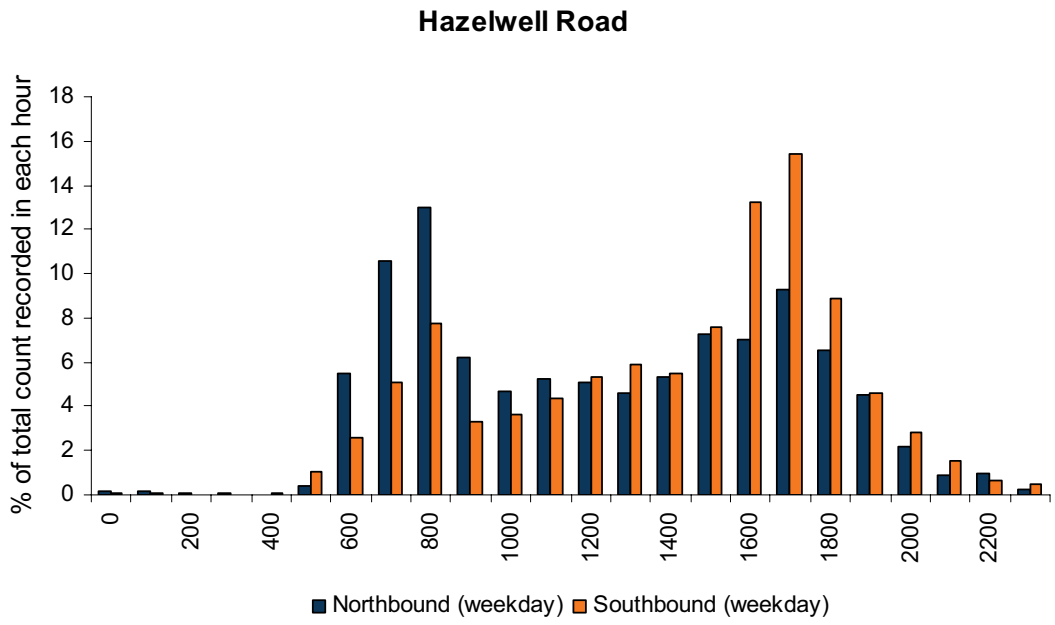
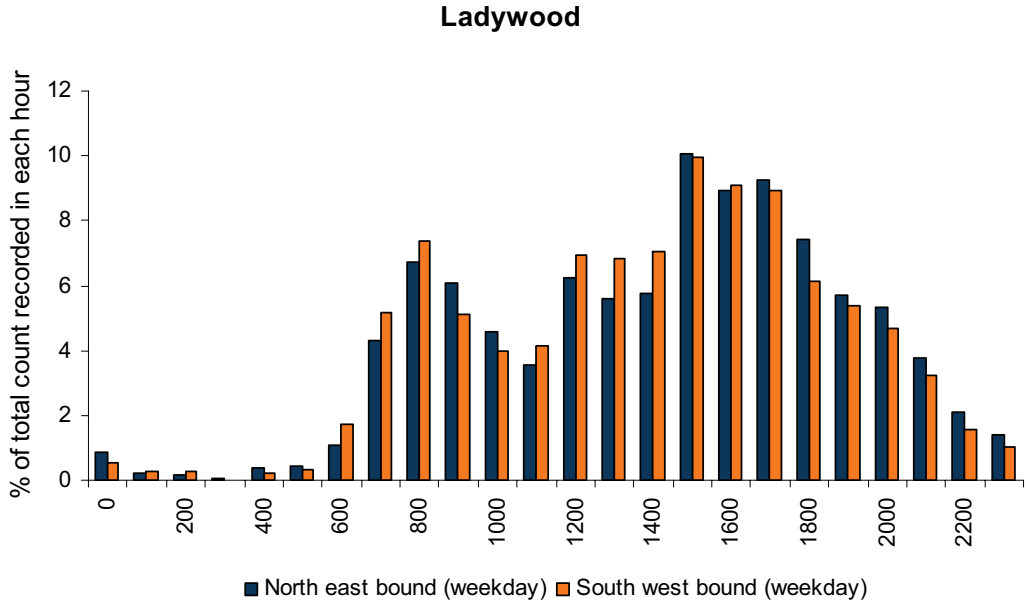
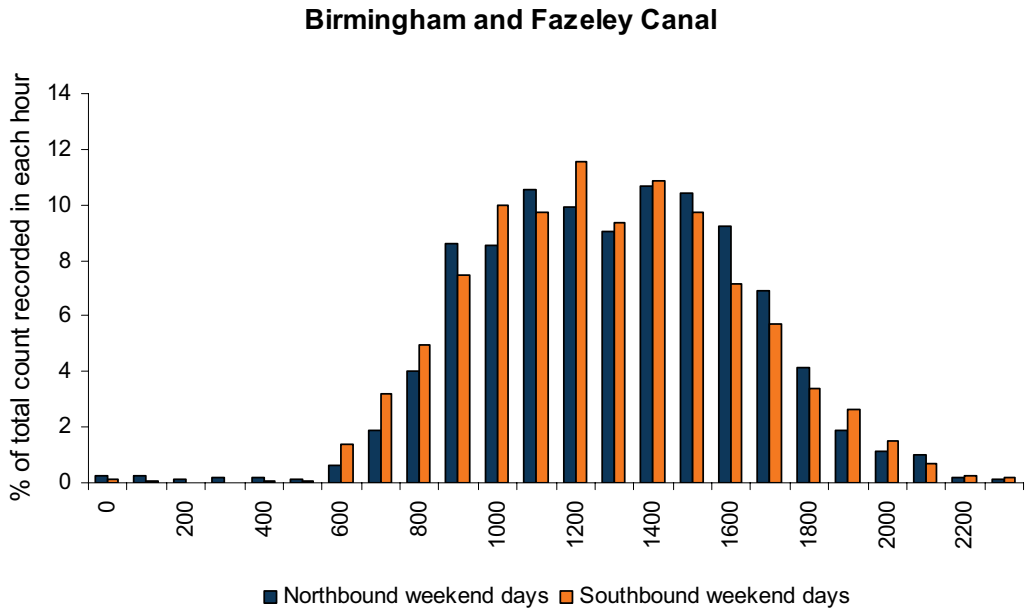


Chart 46: Hourly distribution of counts recorded on weekdays – Ladywood



All of the counters considered display a similar pattern of use on weekend days, typified by an increase in counts recorded into early afternoon, followed by a decline in the volumes of cyclists recorded into the evening. By means of example, the distribution of counts recorded on weekend days by the counter located on the Birmingham and Fazeley Canal is presented below.

Chart 47: Hourly distribution of counts recorded on weekend days – Birmingham and Fazeley Canal



4.2.2 Growth in use at different times of day

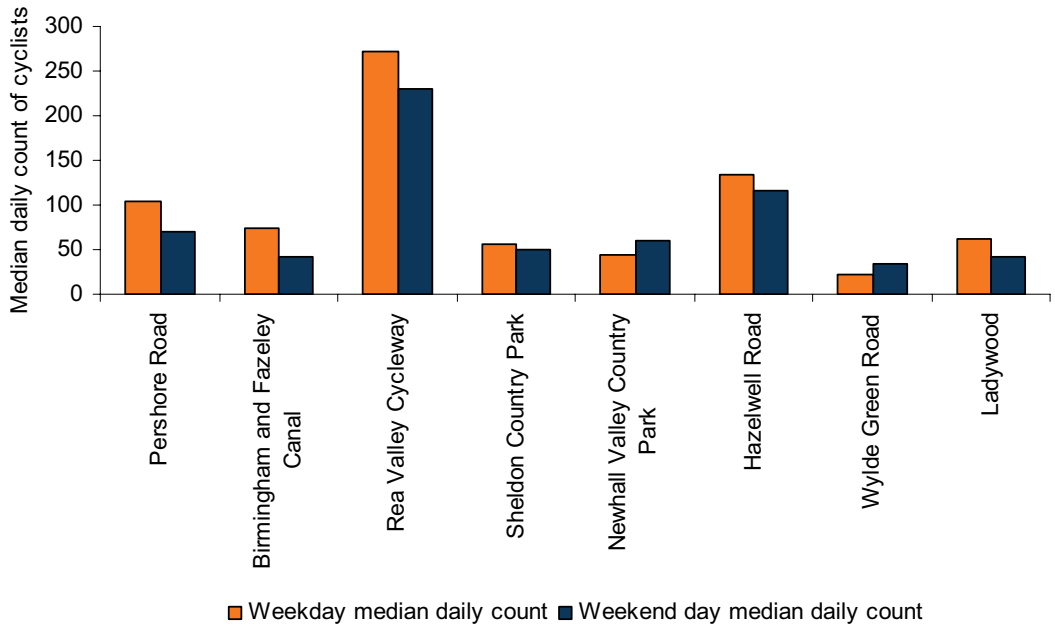
As time series of daily counts of cyclists can be analysed in order to determine the rate of change in levels of cycling at an individual location, hourly data can be analysed in a similar way in order to give an indication of the times of day at which growth is occurring.

Patterns in the growth of counts recorded over time tend to reflect the distribution of counts over the course of the day. So, for example, for counters recording peaks in cycle traffic during the morning and afternoon commuting periods on weekdays, growth in the total count recorded over time is driven by an increase in the number of cyclists recorded at those times.

4.2.3 Comparing weekend and weekday use

Analysis of hourly count data indicates a variation in the distribution of counts across the course of the day at different locations across Birmingham. The overall volume of counts is also observed to vary between weekdays and weekend days. Chart 48 below makes a simple comparison of the median daily count across the whole time series for each counter, for weekend days and weekdays.

Chart 48: Comparison of median daily count recorded on weekdays and weekend days

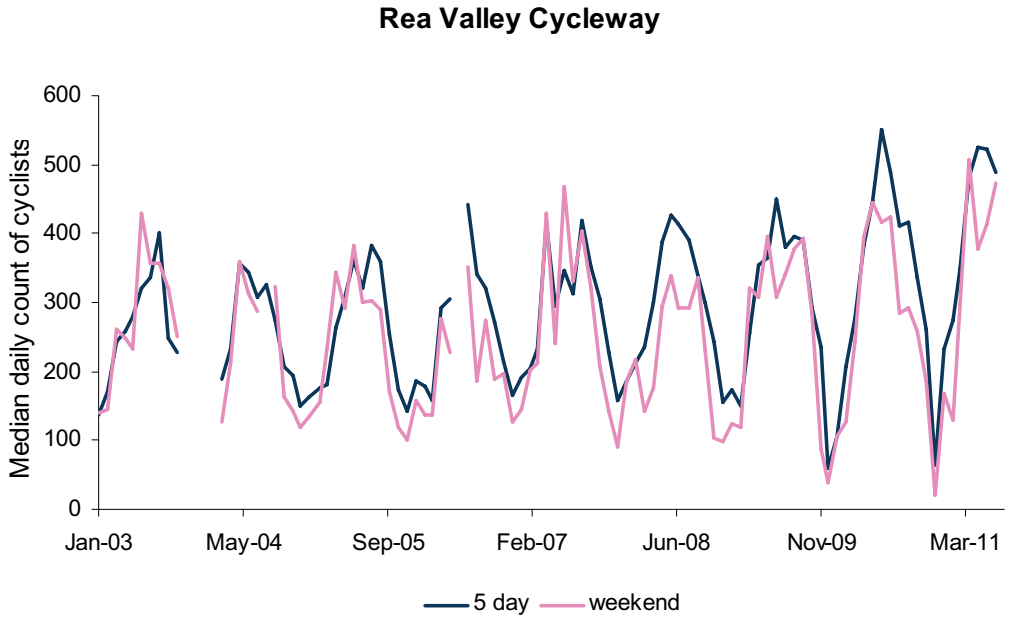


The weekday count is greater that the weekend day count for all but two counters. Those showing the greatest difference between the two day types tend to be those showing the strongest 'there and back' pattern in the diurnal data.

The data presented in Chart 48 represent an overview of the whole time series. A finer level analysis reveals, however, that for some counters the distinction between weekday and weekend days in terms of volumes of cyclists is not constant across the time series.

The counter located on the Rea Valley Cycleway shows, overall, a greater number of cyclists recorded on weekdays compared to weekend days. Chart 49 presents the median daily count on weekdays and weekend days, using all data available from 2003 onwards. In the early part of the time series, the weekend day median is either greater than or similar to the median calculated using weekday data. As time progresses, there appears to be a shift towards a greater volume of cyclists being recorded on weekdays than on weekend days. A similar pattern can be observed in the data collected at the Sheldon Country Park site.

Chart 49: Median daily count of cyclists recorded on the Rea Valley Cycleway – weekdays and weekend days



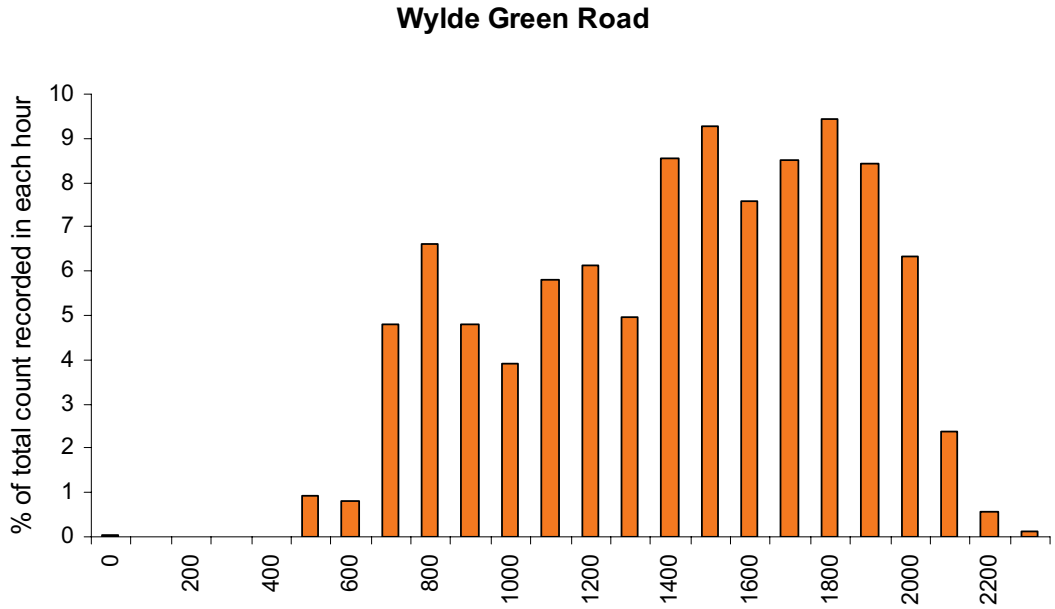
4.3 Route User Intercept Surveys

Intercept surveys of route users have been performed at two locations – Newhall Valley and New Shipton Farm.

At the Newhall Valley location, 90% of cyclists surveyed reported to be making leisure journeys, and 5% were commuting. During the survey performed at New Shipton Farm, 87.8% of all users surveyed reported to be making leisure journeys, whilst 4.1% were commuting.

These findings are supported by the patterns observed in the data recorded by automatic cycle counters close to the survey locations – the diurnal profile for Newhall Valley Country Park (Chart 44) indicates a slight peak in counts around commuting times, but with a generally consistent level of cycling across the course of the day. The diurnal distribution of counts recorded on weekdays by the counter located at Wylde Green, close to the New Shipton Farm site, is presented in Chart 50. This lacks peaks at key commuting times, with a profile more similar to the weekend day distributions observed at other count locations, suggesting a predominance of leisure trips.

Chart 50: Hourly distribution of counts recorded on weekdays – Wylde Green Road

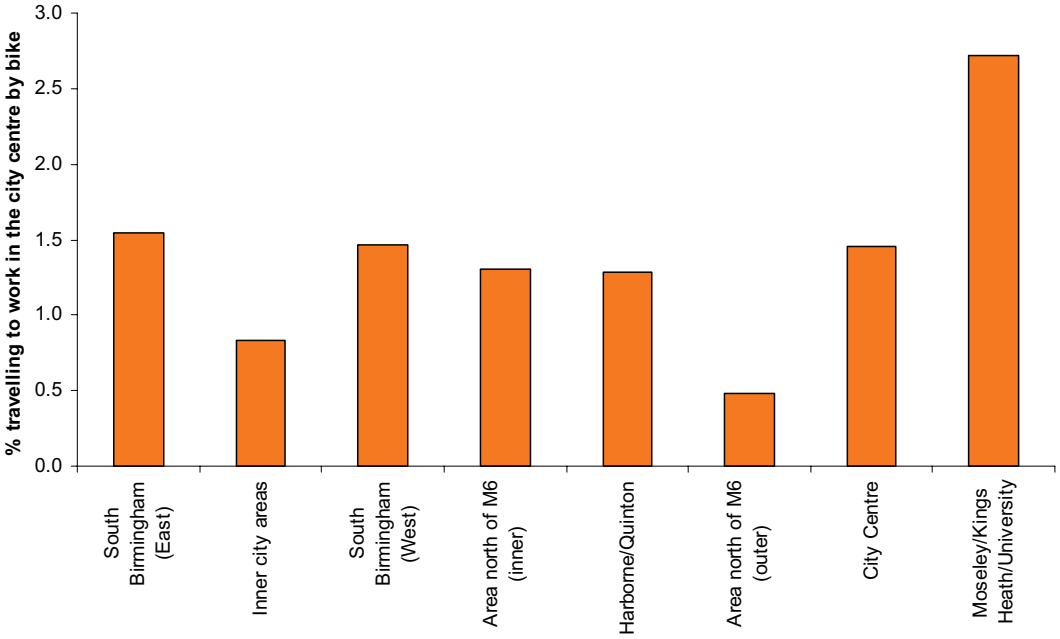


4.4 Analysis of Census travel to work data

Analysis has been performed using travel to work data recorded in the 2001 Census. Whilst we acknowledge that these data are now somewhat out of date, this analysis is intended to give a broad indication of levels of commuting by cycle. The exact release date for 2011 census data at a sufficiently detailed level to permit a reworking of this analysis is yet to be confirmed by the Office for National Statistics, but it is likely to follow some time after the release of headline findings in summer 2012.

The analysis intended to quantify commuting flows from nominated study areas within Birmingham into a 'city centre' area. The percentage of people travelling to work in the city centre area by bike on the day of the 2001 Census are presented in Chart 51. Although these data are now several years old, this analysis suggests variation in levels of commuting by bike, with a notably higher proportion travelling to work in the city centre by bike from the Moseley/King's Heath/Birmingham University areas than from elsewhere in Birmingham.

Chart 51: Percentage of people travelling to work in Birmingham city centre by bike on the day of the 2001 Census


% travelling to work in the city centre by bike
3.0
2.5
2.0
1.5
1.0
0.5
0.0
South Birmingham (East)
Inner city areas
South Birmingham (West)
Area north of M6 (inner)
Harborne/Quinton
Area north of M6 (outer)
City Centre
Moseley/Kings Heath/University

5 Conclusions

Birmingham City Council hold a range of discrete data sources on cycling in the city. In the present report, these various sources have been drawn together, reviewed and analysed in order to provide a holistic picture of cycling in Birmingham. This both serves to demonstrate the progress made in encouraging levels of cycling, particularly over the past three years, and provides a baseline against which future developments can be measured.

Headline findings from this study

On overall levels of cycling:

- based on data collected from automatic cycle counters across Birmingham, there appears to have been growth in levels of cycling across the city over the past eight years, and at locations where data are available for a prolonged period of time, the annual rate of this growth in the period 2008-2011 is greater than in years prior to 2008
- the coverage of the continuous automatic cycle counters (in eight locations) is not complete, but data gathered at these locations allows inference to be made of trends in levels of cycling over time. The volume of data available from each site differs; three have counts dating back to 2003, whilst others were installed more recently. The duration of data available limits the complexity of analysis that can be applied to the data
- taking all data available, the average number of cyclists counted range from around 50 to over 200 per day, with the largest numbers being counted on the popular Rea Valley route. Using data from five counters with more than three years of counter data, the daily count of cyclists increases on average by 10% per year
- growth in cycling appears to have accelerated over the last three to four years. Using data from four counters dating back to 2004 or earlier, we found the daily count of cyclists to increase on average by 11% per year during 2008-2011, compared to 7% per year prior to 2008, and analysing all available counter data together suggests an overall growth in cycling at these specific locations of around 70% against a 2003 baseline
- counts of parked bikes across Birmingham – another measure indicative of overall levels of cycling, suggest more modest increases in levels of cycling over time, reflective of this particular type of data collection.

On the nature of cycling journeys made in Birmingham:

- although automatic cycle counter data give an insight into the volumes of cyclists on the routes where they are installed, these data do not allow for the identification of individuals or journey purpose. However, by examining the hourly flows of cyclists, we find peaks in levels of cycling coinciding with commuting times at most of the eight

cycle counter locations; we therefore infer that some of these trips are being made to and from workplaces

- the average number of cyclists counted on weekdays tends to be larger than the number counted at the weekends for the majority of count locations. Based on all data available, the rate of growth in the numbers of cyclists recorded is greater during the week, when the daily count of cyclists increased on average by 11%, compared to 7% for weekend day data. Although we see an enhanced rate of growth in both weekday and weekend day records of cyclists during the period 2008-2011, during this time the rate of growth in weekday cycling is slightly less than for weekend days – the daily count of cyclists recorded on weekdays increases by 9% per year during 2008-2011, compared to 11% for weekend days
- examining the hourly records of counts of cyclists indicates there to be growth at the times of day associated with commuting, although we cannot say with certainty that all of these trips are being made for commuting purposes
- there is evidence of substantial use of key leisure routes, and intercept surveys of route users indicate that at the survey location and at the time of the survey, high proportions of users were making leisure journeys.

On levels of cycling amongst children and young people:

- in 2010, 0.4% of primary school children and 0.6% of secondary school children in Birmingham reported to cycle to school – compared to 1% of primary school children and 3% of secondary school children across England as a whole
- in some areas levels of cycling to school more closely reflect the national trend – in the Moseley, Kings Heath and Birmingham University areas, the percentage of primary school children cycling to school in 2010 was 1%, although levels of cycling to secondary school were similar to elsewhere in Birmingham at 0.6%
- programmes to encourage cycling to school have a positive effect – for pupils participating in Bike It during the 2010/2011 academic year, the proportion of children cycling to school on the day of the survey increased from 2.8% to 9.3%, and the proportion cycling regularly increased from 9% to 24.5% following the intervention. The relative percentage increase in the proportion of children cycling regularly to schools in Birmingham following Bike It (172%) is greater than that across England (81%).
-

On accidents involving cyclists in Birmingham:

- based on the STATS19 record, the total number of accidents in Birmingham involving cyclists for the period 2008-2011 was lower (708) that recorded for the period 2005-2007 (739). However, there was an increase in the number of serious injury accidents between these two periods, from 74 to 114, whilst the number of fatalities remained

constant (4) and the number of slight injury accidents declined from 661 for 2005-2007 to 590 for 2008-2010

- whilst the number of serious accidents involving cyclists has increased between the two time periods considered, the overall levels of cycling have also increased over time, and more substantially so. Any accident involving a cyclist is a matter to be taken very seriously; however, the change in the accident rate over time does not mirror the greater uplift in overall cycling levels suggested by the cycle count data.

In this report we summarise analysis of data collected since 2003 relating to cycling in Birmingham. To date, monitoring of cycling in Birmingham has not been approached in a particularly cohesive or methodical way. In order to help address some of these deficiencies, we propose a set of outcomes and indicators and a suite of monitoring tools to measure progress against these, presented in the report 'Cycling in Birmingham: monitoring and evaluation framework and plan.

6 Appendix

6.1 Detailed results of analysis of individual continuous automatic cycle counters

Table 1: Qi (the average annual change in the average daily count), median daily count across the time series and % change in the annual average daily count – Pershore Road

	2003-2011	7 day	5 day	weekend day
Footpath + road	Qi (average annual change in average daily count)	3.5	3.9	0.8
	median across whole time series	96.0	104.0	70.0
	% change	3.6	3.8	1.2
Footpath	Qi (average annual change in average daily count)	1.2	1.8	-0.3
	median across whole time series	56.0	59.0	44.0
	% change	2.1	3.0	-0.6
Road	Qi (average annual change in average daily count)	2.1	2.3	1.1
	median across whole time series	39	44	26
	% change	5.4	5.3	4.3
	2003-2007	7 day	5 day	weekend day
Footpath + road	Qi (average annual change in average daily count)	3.1	4.2	2.0
	median across whole time series	91.0	98.0	69.0
	% change	3.4	4.3	2.9
Footpath	Qi (average annual change in average daily count)	1.4	2.4	1.0
	median across whole time series	53.0	56.0	44.0
	% change	2.7	4.2	2.3
Road	Qi (average annual change in average daily count)	0.6	1.0	1.1
	median across whole time series	36.0	40.0	25.0
	% change	1.7	2.5	4.3
	2008-2011	7 day	5 day	weekend day
Footpath + road	Qi (average annual change in average daily count)	8.8	6.5	5.0
	median across whole time series	104.0	112.0	71.0
	% change	8.5	5.8	7.0
Footpath	Qi (average annual change in average daily count)	0.8	2.5	1.0
	median across whole time series	58.0	64.0	43.0
	% change	1.3	3.9	2.3
Road	Qi (average annual change in average daily count)	4.5	4.5	3.3

	median across whole time series	44.0	49.0	28.0
	% change	10.2	9.2	11.6

Table 2: Median daily count across the time series and % change in the annual average daily count – Birmingham Fazeley Canal

2003-2011	7 day	5 day	weekend day
Qi	1.5	1.6	1.3
median across whole time series	65	74	42
% change	2.3	2.2	3.0
2003-2007	**7 day**	**5 day**	**weekend day**
Qi	-0.8	-0.5	0.5
median across whole time series	60	69	39
% change	-1.4	-0.7	1.3
2008-2011	**7 day**	**5 day**	**weekend day**
Qi	13.0	9.6	7.4
median across whole time series	72	82	47
% change	18.1	11.7	15.9

Table 3: Qi, median daily count across the time series and % change in the annual average daily count – Rea Valley Cycleway

2003-2011	7 day	5 day	weekend day
Qi	14.1	15.2	4.9
median across whole time series	260	272	231
% change	5.4	5.6	2.1
2003-2007	**7 day**	**5 day**	**weekend day**
Qi	10.8	12.3	2.5
median across whole time series	236.5	243.0	220.0
% change	4.6	5.0	1.1
2008-2011	**7 day**	**5 day**	**weekend day**
Qi	28.0	28.5	27.0
median across whole time series	296.0	309.0	245.5
% change	9.5	9.2	11.0

Table 4: Qi, median daily count across the time series and % change in the annual average daily count – Sheldon Country Park

2004-2008	7 day	5 day	weekend day
Qi	8.2	9.2	4.8
median across whole time series	56.0	57.0	50.0
% change	14.7	16.1	9.6
2004-2007	**7 day**	**5 day**	**weekend day**
Qi	9.0	9.5	5.8
median across whole time series	43.0	43.0	42.0
% change	20.9	22.1	13.7
2008-2011	**7 day**	**5 day**	**weekend day**
Qi	6.3	7.7	5.8
median across whole time series	74.0	79.0	61.0
% change	8.4	9.7	9.4

Table 5: Qi, median daily count across the time series and % change in the annual average daily count – Newhall Valley Country Park

	7 day	5 day	weekend day
Qi	11.5	13.3	12.5
median across whole time series	48.0	45.0	60.5
% change	24.0	29.4	20.7

6.2 Exploration of potential impact of installation of solar studs on cycle routes in Birmingham

Solar studs were installed on National Cycle Network Route 5 in 2010. Of the counters in Birmingham, the Hazel Road counter is located closest to the areas where the solar studs have been installed, however too little data are available from this site to enable a comparison of data before and after installation. Any impact of the solar studs on cycling levels is expected to be noticeable in the data from the counter on the Rea Valley cycleway.

In order to explore the potential impact of the solar studs on cycling levels, weekday count data collected in the winter months (October to March) between 7pm and 8pm are compared for the years 2007 to 2011. As well as the Rea Valley cycleway, the same analysis is performed using data from the Sheldon Country Park and the Birmingham and Fazely Canal for comparison.

The findings of this analysis are presented in the following charts.

Chart A1: weekday evening counts at Rea Valley cycleway

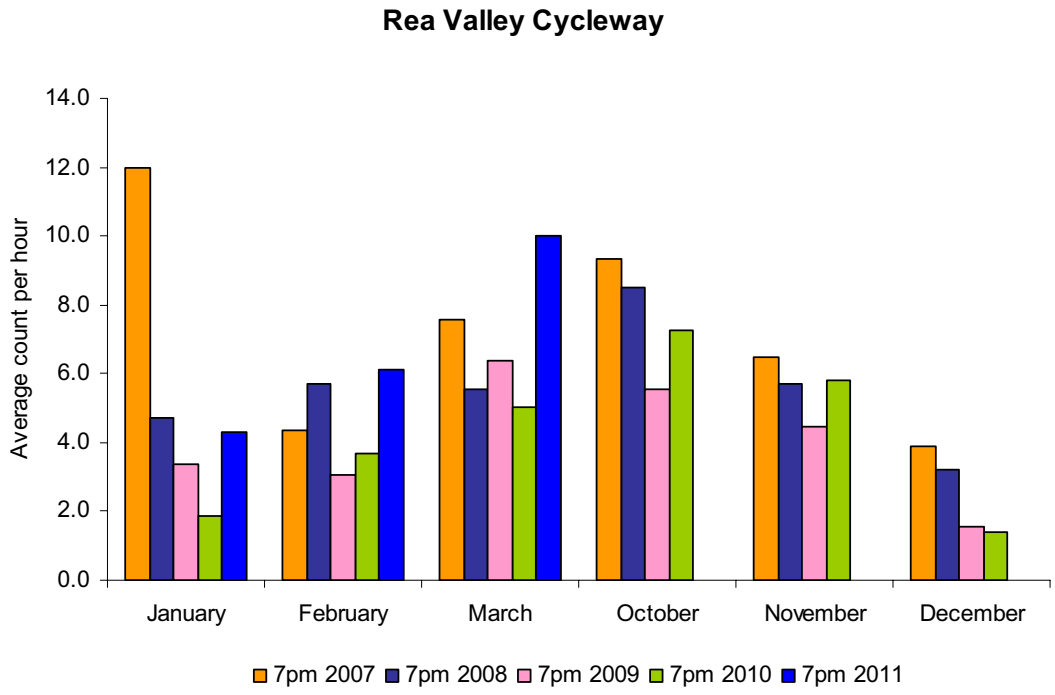


Chart A2: weekday evening counts at Birmingham Fazeley Canal

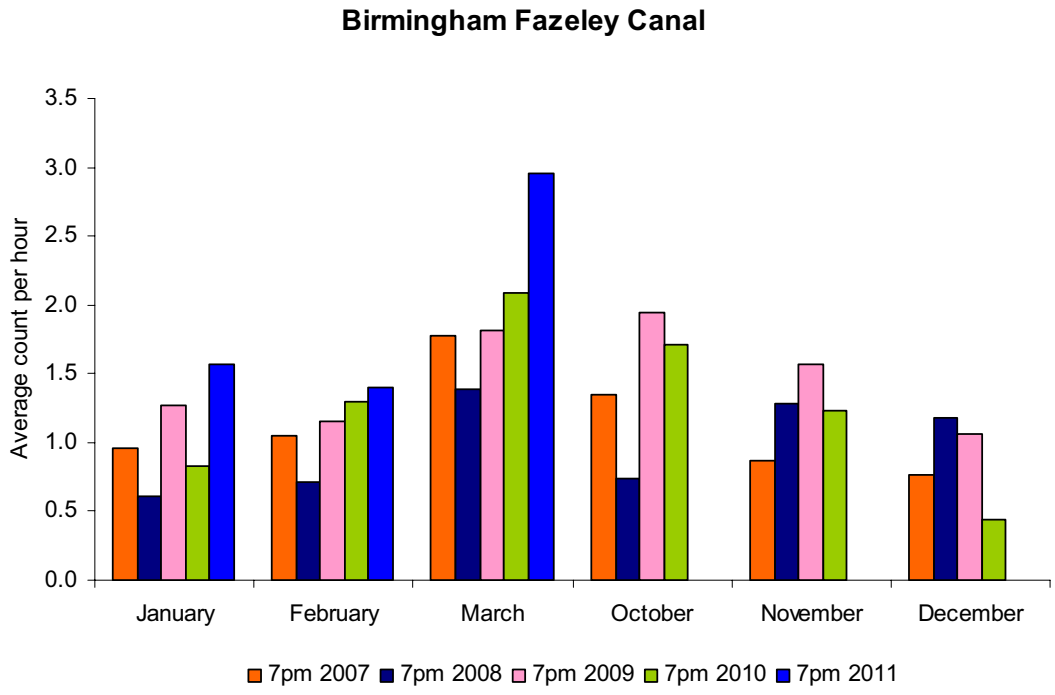
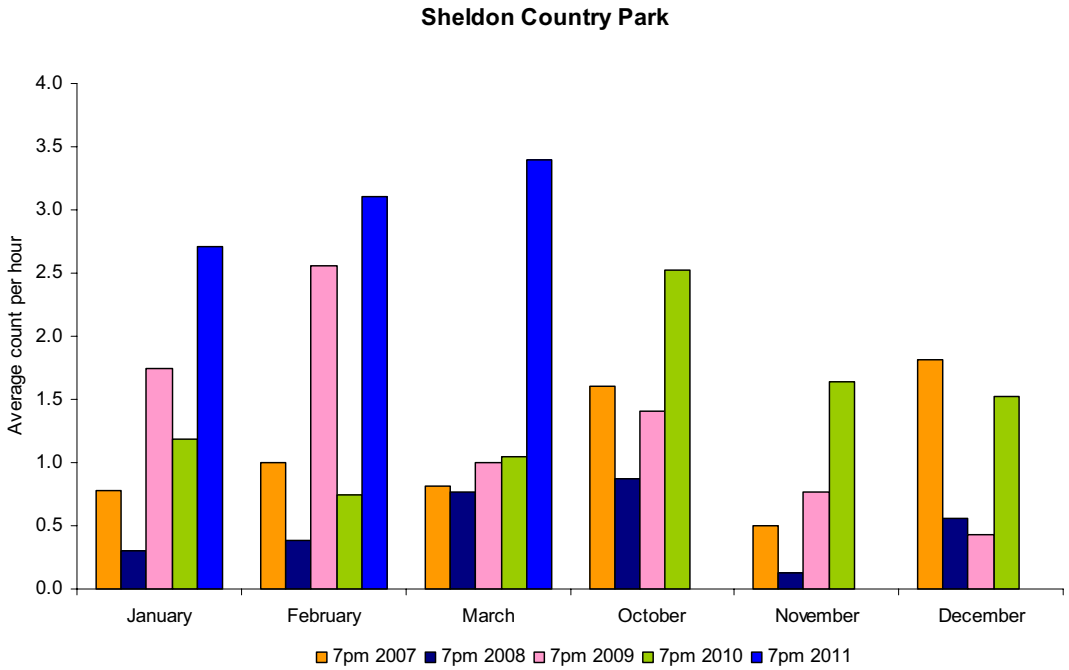


Chart A3: weekday evening counts at Sheldon Country Park



Whilst data collected at the Rea Valley Cycleway site suggests an increase in the average count recorded between 7pm and 8pm between 2010 and 2011, a similar pattern is seen in data from the other two counters where solar studs have not been installed.

6.3 Detailed results of cycling accident data

Table 6: Summary of cycling accident data provided by Birmingham City Council

	Killed	Seriously injured	Slightly injured	All accidents
2000	0	35	289	324
2001	1	20	240	261
2002	0	24	208	232
2003	0	31	201	232
2004	1	13	193	207
2005	0	27	248	275
2006	2	21	188	211
2007	2	27	223	252
2008	0	37	194	231
2009	2	35	196	233
2010	2	47	200	249

Table 7a: Summary of cycling accidents in England as reported by STATS19

	Killed	Seriously injured	Slightly injured	All accidents
2005	130	2,037	13,183	15,350
2006	127	2,097	12,706	14,930
2007	129	2,206	12,704	15,039
2008	102	2,236	12,806	15,144
2009	93	2,377	13,386	15,856
2010	102	2,456	13,399	15,957

Table 7b: Summary of cycling accidents in Birmingham as reported by STATS19

	Killed	Seriously injured	Slightly injured	All accidents
2005	0	26	246	272
2006	2	20	188	210
2007	2	28	227	257

2008	0	36	193	229
2009	2	34	195	231
2010	2	44	202	248

Table 8: Summary of cycling accident data provided by Birmingham City Council by corridor

(a) City centre

	Killed	Seriously injured	Slightly injured
2000	0	2	36
2001	0	2	26
2002	0	4	35
2003	0	7	24
2004	0	3	28
2005	0	2	28
2006	0	2	31
2007	0	2	27
2008	0	5	31
2009	1	5	28
2010	0	2	24

(b) Area north of the M6

	Killed	Seriously injured	Slightly injured
2000	0	3	21
2001	0	0	14
2002	0	2	10
2003	0	0	6
2004	0	1	18
2005	0	4	12
2006	1	3	12
2007	0	2	14
2008	0	4	4
2009	0	1	16
2010	0	5	11

c) Moseley, Kings Heath and University

	Killed	Seriously injured	Slightly injured
2000	0	4	25
2001	0	3	26
2002	0	4	18
2003	0	2	17
2004	0	0	14
2005	0	2	17
2006	0	1	15
2007	0	4	20
2008	0	2	18
2009	0	6	21
2010	0	2	25

(d) Harborne and Quinton

	Killed	Seriously injured	Slightly injured
2000	0	1	11
2001	0	1	19
2002	0	0	7
2003	0	2	11
2004	0	1	6
2005	0	0	9
2006	0	2	8
2007	0	1	11
2008	0	1	7
2009	0	2	14
2010	0	0	7

(e) South Birmingham

	Killed	Seriously injured	Slightly injured
2000	0	14	130
2001	1	10	116
2002	0	10	93
2003	0	12	102
2004	1	6	75
2005	0	12	97
2006	1	7	80
2007	2	14	98
2008	0	10	91
2009	1	17	85
2010	0	19	104

(f) Inner city wards

	Killed	Seriously injured	Slightly injured
2000	0	3	25
2001	0	1	22
2002	0	3	23
2003	0	3	20
2004	0	0	23
2005	0	0	14
2006	0	2	19
2007	0	2	19
2008	0	3	21
2009	0	5	19
2010	0	2	21

Walking and cycling infrastructure
Evidence of economic impacts

1 Areas of impact

The following areas of economic impact, and pathways to impact, are associated with the delivery of 'Connect2' style infrastructural interventions.

Increased economic productivity:

Access to markets

1. overcoming physical and journey time barriers , improving access to local labour and consumer markets
2. reducing congestion on the surrounding road network, which has an impact on journey time reliability and predictability

Business productivity

3. increasing walking and cycling, contributing to reduced absenteeism and improved employee health and concentration
4. reducing costs of land take and parking provision for staff and customers

Increased economic activity:

Job creation

5. direct jobs creation through the development, engineering and maintenance of infrastructure
6. indirect jobs creation, including in the supply chain, public transport, retail and tourism sectors
7. induced effects jobs are created by the impact of the increased spending power of people who are employed directly or indirectly

Economic vitality

8. improved access to existing retail centres and other local facilities
9. increased spending associated with walking and cycling leisure and tourism activity

Wider impacts:

Reduced travel costs

10. additional spending potential for individuals
11. cost barriers removed that restrict people from accepting employment

Regeneration effects

12. increased local amenity through improvements to aesthetics, liveability and connectivity
13. business relocation and uplift in land values and tax revenues through improved amenity and accessibility

2 Evidence from Connect 2

Evidence is emerging from Sustrans Connect 2 schemes of the areas of economic benefits identified above (areas in brackets).

Sale and Stretford: very notable uplift in levels of walking and cycling

Intercept surveys carried out before and after construction of the canal towpath have provided the following data to support the evidence of economic growth:

- using webTAG a BCR has been calculated at over 4:1 for this route
- the estimated annual usage of the route increased from 62,000 trips to 163,000 and the level of commuters increased from 7,000 to 75,000 (1,2 & 3)
- those reporting journey efficiency as a factor influencing their decision to use the route increased from 5.4% to 64.6% (1); users who stated that they could have used a car but chose not to increased from 14.9% to 60.4% (2)
- a benefit of £139,000 has been estimated from reduced absenteeism (3)
- demonstrating the enhanced amenity of the area, users cited factors that have influenced their decision to use the route, including pleasant surroundings (increased from 42.9% to 80.8%) and quality of route (increased from 29.1% to 69.3%) (11 &12)
- those reporting that they can save money by using the route has increased from 16.0% to 64.9% (9 & 10)[1]

A feasibility study for the 39 mile Bridgewater Way (of which the Connect2 scheme forms an integral section) estimated that, when completed, it will create up to 250 new jobs and bring over £6 million into the local economy[2]

Blyth and Bedlington: creation of direct employment

Two Connect2 schemes in the North East are responsible for 100,000 man hours of work for the 18 months up to September 2011 (4), delivered by a UK-based company and providing local jobs.

- the contractors currently employ 12 direct operatives (but as many as 22 during peak periods)
- four local apprentices are assigned to the work
- additionally, a local cleaner is employed and all excavators used are sourced from local suppliers [3]

Blyth workplace travel survey reported that journeys to work by active mode have increased from 17% pre survey to 27% between 2010 and 2011 (1 & 2). [4]

Connect2 Northampton: connectivity stimulating new trips

Previously muddy and difficult to access pathways have been upgraded alongside the installation of a new bridge which have vastly improved links between residential areas and employment sites (1,2 & 3)

- the estimated annual usage of the route increased from 35,000 trips to 71,000 and commuter numbers increased from 6,000 to 13,000 (1,2 & 3)[5]

Connect2 Southampton: increasing leisure and retail footfall

Since a Boardwalk structure was installed along the River Itchen connecting St Denys with St Mary's, there has been a 63% increase in footfall in the St Denys area.[6]

This has resulted in increased turnover for a local pub (5, 6, 8). The landlord reports:

- "we have seen an increase in turnover as a result of the boardwalk … during the week people will come in and say they have been across the boardwalk … particularly on match days"

Connect2 Worcester: growing business

Following completion of the Diglis Bridge, the nearby hotel has seen positive impact on its business according to Steve Pirone, the general Manager: (5, 6 & 8)

- "The Connect2 route has increased our business… it's also about employing more staff which has a positive knock-on effect throughout the local economy"
- "There's been at least a 20% increase in our bar and restaurant sales … food sales at the hotel are at their best for 17 years … the hotel has now installed cycle parking" [7]

Millennium Bridges: commuter and retail trips

The York Millennium Bridge, built in 2001 established traffic free routes on either bank of the River Ouse.

- prior to construction of the bridge, the routes carried around 650,000 trips by all users, in 2002 this increased by 59% to over one million and further in 2011 to 1.6 million users[8]
- the number of utility trips more than doubled following construction from 160,000 to 390,000 trips annually and in 2011 44.2% were commuting (1,2 & 3)
- users who could have used a car in 2011 rose to 58.6% (3), while 97.7% of respondents liked the surroundings of the route (11 &12) and 71.9% agreed that they can save money by using the route (9 & 10)[9]

41% of all journeys carried by the Millennium Bridge in Coleraine are for shopping whilst 27% are for commuting highlighting the potential for retail impact of such structures (7)[10]

The total number of cyclists crossing the Millennium Bridge in Lancaster exceeds 300,000 annually[11]

Nottingham universities campus links: access to places of work and learning

The Ucycle Nottingham project has improved cycle routes for commuters, through a series of 5-6 mile routes including links between Clifton, Hucknall Town Centre, Strelley village and Nottingham City Centre, alongside a programme of smart measures:

- cycling levels reported in travel surveys have increased by 56% on average over the course of the project, exceeding the project target of a 50% increase in the number of trips made to work by bicycle (1 & 2)
- Queens Medical Centre showed an increase in the number of cyclists describing themselves as new cyclists from 3% in 2010 to 17% in 2011 (1 & 2)[12]

London Greenways: impacting in the capital

- intercept surveys at Proyers Path in Brent show a rise in the proportion of users who were travelling for shopping from 11.1% to 25.8% following infrastructural and connectivity improvements to the route (7)[13]
- also in Brent, a key link over a Bridge at the Grand Union Canal joining a housing area with an industrial site saw an increase in commuter journeys from 31% to 41%. Overall annual usage estimate rose from 584,000 in 2006 to 690,000 in 2010 (1,2 & 3)[14]
- previous surveys on the Grand union Canal were conducted following access and surfacing improvements to the National Cycle Network. Between 2002 and 2004, at the Abbey Road site there was a 321.7% increase in cyclists and 232.4% increase in pedestrians, 49.3%

could have used a car but chose not to and 82.0% of trips made on the route are for the purpose of commuting (1, 2 & 3) [15]

Retail vitality: the importance of walking and cycling to local retail

TfL research has demonstrated that the average weekly spend on retail streets was highest among pedestrians.[16] This substantiates Sustrans' research that found that pedestrians contributed 35% to the total spend in neighbourhood shopping areas, whereas car drivers accounted for only 10%.[17]

Traffic-free routes: a vital artery for commuting

Data gathered on urban, traffic-free sections of the National Cycle Network shows that around 30% of trips observed are made for commuting purposes. The proportion of trips that are being made for commuting purposes is considerably higher on these routes than it is among cyclists and walkers generally (around 10% according to the National Travel Survey) or among all trips (around 15%).[18]

3 Other evidence

Other evidence of economic impact of walking and cycling infrastructure is emerging, for instance on the scale of potential change and benefits from increasing cycling in the city regions[19]. Recent research has also highlighted the mismatch between urban employment locations and areas of high unemployment, where walking and cycling offer low cost solutions to limited spare public transport capacity and congestion constraints. [20]

Sustrans analysis of workplace travel also demonstrates the potential that exists to improve access to work through development of cycling and walking infrastructure (see annex). In Southampton, the areas to the south of the scheme have about 20% of their workers coming from within the study area. These maps illustrate the potential which exists to improve access to employment for both existing workers and those seeking work.

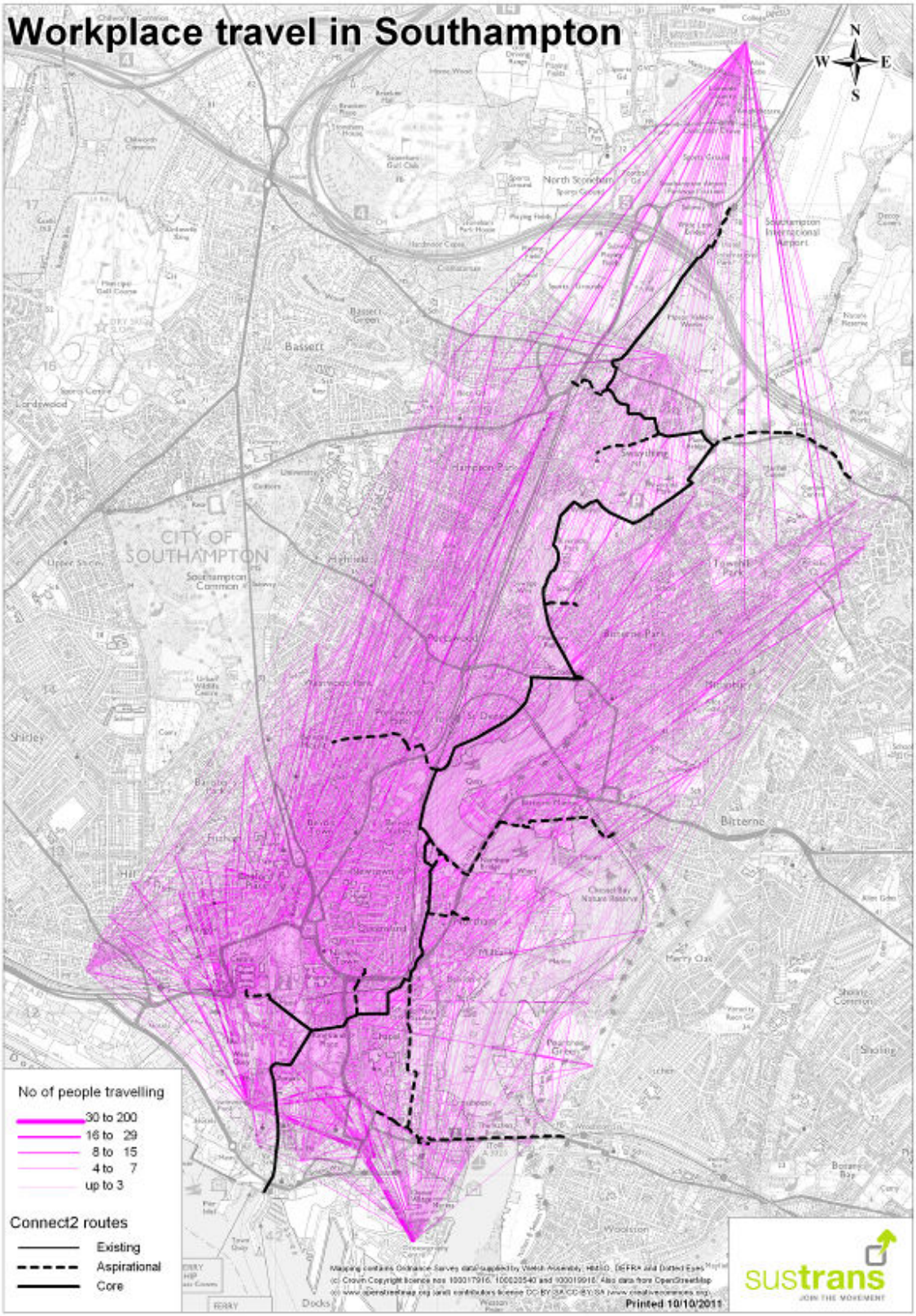
October 2011

[1] Sustrans (2011) Edge Lane Stretford RUIS report;
[2] King Sturge (2005) Bridgewater Way: the economic case
[3] Personal communication (2011)
[4] Sustrans (2010), Blyth workplace travel survey: Comparison of 2010 and 2011 data; Personal communication from employer
[55] Sustrans (2010), Connect2 Northampton: Briar Hill route user survey interim report
[6] Personal communication (2011)
[7] Sustrans (2011) Connected: Spring 2011
http://www.sustrans.org.uk/assets/files/connect2/sus818_Connected%20issue5_print_links.pdf
[8] Sustrans (2002) Monitoring brochure 2000 – 2002
[9] Sustrans (2011) Millennium Bridge York CCT RUIS report
[10] Sustrans (2004) Coleraine Millennium Bridge usage survey
[11] Sustrans (2009) Cycling Demonstration Towns monitoring report
[12] Sustrans (2011), UCycle Nottingham monitoring report: Nottingham university hospital NHS Trust
[13] Sustrans (2010) Transport for London Greenways report: Proyers Path, London Borough of Brent
[14] Sustrans (2010) Grand Union Canal, Brent: Survey Summary
[15] Sustrans (2007) Park Royal Grand Union Canal Towpath Usage Survey
[16] TfL (2011) Travel and spend in London's town centres
[17] Sustrans (2006) Real and perceived travel behaviour in neighbourhood shopping areas in Bristol
[18] Sustrans (2005) The National Cycle Network route user monitoring report
[19] Sustrans/PTEG (2011) Cycling in the city regions
[20] Centre for Cities (2011) Access all areas: Linking people to jobs

Annex 1: Sale


Workplace travel in Sale
City centre OA (yellow area) is larger than normal, all the journeys to and from here go to this point
There were 700 people making a journey to/from this area each day (500 by car) according to the 2001 census
N
W
E
S
No of people travelling
30 to 200
16 to 29
8 to 15
4 to 7
up to 3
Connect2 routes
Existing
Aspirational
Core
TRAFFORD
SALE
Printed 10/10/2011
sustrans

Annex 2: Southampton



Response to the call for evidence for the Scrutiny Inquiry on 'Alternative Transport: Cycling in the city; the city's canals'

Introduction

CTC, the national cycling charity, was founded in 1878. CTC has 70,000 members and supporters, provides a range of information and legal services to cyclists, organises cycling events, and represents the interests of cyclists and cycling on issues of public policy.

We welcome the opportunity to respond to the inquiry. The following answers are intended to supplement the response from Professor David Cox, Chair of CTC Council.

1. How can we encourage cycling in the city that is efficient and safe, getting people from A to B desirably and sustainably linking urban areas?

CTC applauds the desire to ensure that cycling operates as a transport system linking places, rather than just a leisure pursuit. Cycling could play a much larger role in transport than it does currently in Britain. Only around 2% of trips are made by bike in Britain, compared to 27% in the Netherlands, and around 1 in 10 in Germany.

To encourage cycling CTC makes the following recommendations to local authorities:

- **Commit to cycling by** giving full recognition to its environmental, health and other benefits; linking cycling with the wider aims of local transport and other policies, especially by aiming for *more* as well as *safer* cycling and tackling the deterrents (e.g. speeding, bad driving, hostile road conditions and lorries); linking cycling plans with other strategies/policies (e.g. planning, health, education and the economy); and forging partnerships with other local partners in health, education, business public transport, the police and voluntary sector groups.
- **Make the physical environment cycle-friendly by** ensuring that developments are accessible and permeable by cycle; that highways are engineered, laid out, signed and maintained with cycle users in mind; and enhancing provisions for recreational and off-road cycling.
- **Promote cycling by** making national standards cycle training (Bikeability) available to people of all ages; supporting school and workplace travel plans and incentives; and encouraging cycling with promotional material, campaigns and personal advice.
- **Resource the plan well by** committing capital, revenue and staff resources to cycling, training staff appropriately and harnessing the support of the voluntary sector.

- **Evaluate and monitor the plan effectively by** committing to substantial increases in cycle use; measuring cycle casualties per mile or per trip; monitoring how safe people think cycling is; identifying suitable data collection and reporting mechanisms; and seeking feedback from key partners, including local communities and the voluntary sector.

2. How can natural green corridors and walkways alongside road networks be best used to create a city cycle and/or pedestrian network? How has this been developed in other cities?

Natural green corridors and walkways alongside road networks must be considered as separate and very different means of accommodating cyclists. The former can provide a highly attractive and pleasant environment for cycling, however, it will only supplement the existing road network – it can never replace it fully, since routes using canal towpaths or disused railway lines will never connect every neighbourhood.

On the other hand existing walkways alongside roads are often not designed for cyclists and in many cases are inappropriate without considerable improvement to their design to accommodate cycling.

In general, CTC recommends that when planning for cyclists, designers should follow the main government guidance on cycle infrastructure which recommends that cyclists are best accommodated on roads where traffic volumes and speeds have been reduced.[1]

For residential roads, 20 mph speed limits and point closures to reduce through traffic are likely to be the most effective means of making conditions better for cycling. However, on busier streets and major roads other forms of infrastructure may be required, such as wide on-street cycle lanes, the use of bus lanes or off-carriageway cycle tracks. However, off-carriageway cycle tracks that merely involve the designation of a pavement as a shared use route should be considered only when all other options have been considered.

Where off-carriageway cycle tracks are used they must be of sufficient quality – too often pavements that have been converted into cycling facilities are of a very poor standard. Pavements designed for pedestrians are usually inappropriate for cycling, with sightlines, junctions and turning radii that require cyclists to slow down to a stop repeatedly.

Cycling is an effective mode of transport because it enables people to maintain their self-generated momentum much more effectively than walking. Once up to speed a cyclist can roll along at around 10-12 mph with as little effort as it takes to walk. Each stop and start uses considerable energy – cycling 4km with two

[1] DfT/DCLG/WAG, 2007. *Manual for Streets*. p 43; DfT, 2008. *Cycle Infrastructure Design*. p 10

stops is the equivalent to cycling 3.3km with 6 stops.[2] A facility which forces cyclists to stop and start at every junction – as an ordinary pavement conversion would - will not be welcomed and may even make conditions for cycling more risky.

With care and attention to detail, high quality cycle facilities can be constructed, either on or off-road. In Brighton, a new 'hybrid' cycle lane (ie, separated from the pavement, slightly above the carriageway, but still officially part of the carriageway) has been constructed on a major road, Old Shoreham Road. Although not perfect, CTC feels that this scheme is about the highest quality that can be achieved under current regulations that govern road layouts.[3] This scheme is featured as one of the 15 schemes which make up *Cycletopia,* CTC's model cycling city, comprising examples of real life examples of what can be done to improve conditions for cycling.

Some parts of London's cycle superhighway project improved existing off-carriageway facilities (such as Cycle Superhighway 3) while others reallocated roadspace away from the carriageway to provide wide (over 2 metres) on-carriageway cycle lanes. It should be noted, however, that in many other locations in the current cycle superhighway provision, particularly at major junctions, the standard of design is still low. Cycle networks will only operate effectively once a minimum standard of comfort and safety has been reached over the whole route.

3. What are the resource implications of adapting current cycle routes and joining them up?

4. Which partners can help us to do this and what resources do we need?

The overriding principle should be maximising use of existing assets by ensuring that they can be accessed, are well designed and adequately maintained. We therefore support the proposal that the aim should be to complete or improve the current network as much as possible.

Until the network operates seamlessly, trip levels will be low and any previous investment in creating and maintaining the fragmented network less effective than it might otherwise be.

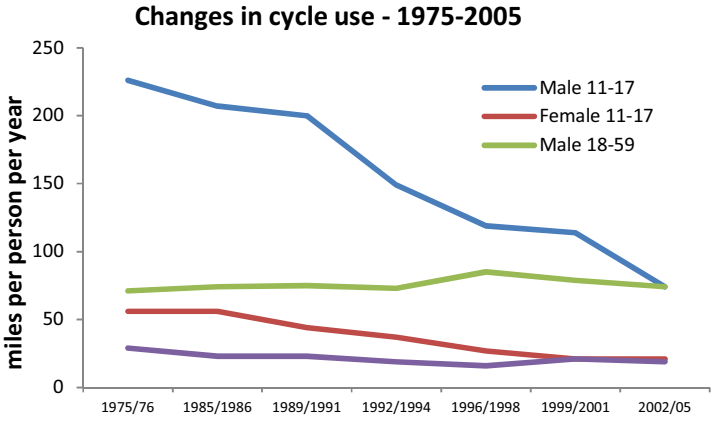
Analysis of small scale cycling and walking projects tend to show extremely high benefit:cost ratios – typically around 20:1, far higher than can be found in larger public transport schemes.[4] Although there may be resource implications to

[2] J Parkin, 2008. 'The importance of human effort in planning networks.' Presentation to NECTAR Integrated Transport Workshop, Oxford.
[3] See: http://beta.ctc.org.uk/news/2012-06-18/brightons-old-shoreham-road-cycle-ways-to-future
[4] DfT, 2010. *Guidance on the Appraisal of Walking and Cycling Schemes TAG Unit 3.14.1,* pp 28-33

improving the current network, the benefits are likely to be far greater than any larger scale projects.

5. Who is currently cycling? Who could be most easily encouraged into cycling? What are the barriers and opportunities to uptake by more people and between more places?

Nationally cycling has increased by around 20% over the last 10 years. However most of that increase has been amongst adults, with an overall decline in child cycling, amongst whom there has been a substantial fall in cycling over the last few decades, as the following graph shows.



Source: National Travel Survey

Cycling levels amongst black and minority ethnic groups tends to be lower than amongst other groups. Participation in cycling is below 5% for all Asian men and women; it ranges between 5% for Pakistani men to 0% for Bangladeshi women compared to 16% for men and 8% for women amongst the whole UK population.[5] CTC's Cycle Champions project focussed its efforts on groups with lower access to cycling, providing cycle training, led rides and other activities.

In general the barriers to getting more people cycling tend to revolve around the perception of danger when using the road network – 61% agree with the statement that "it is too dangerous for me to cycle on the roads".[6] Overcoming this major barrier requires a large range of interventions, from reducing volumes and speeds of traffic, physical improvements to roads and junctions to reducing people's disinclination to cycle through changing perceptions and shifting the attitudes to cycling.

CTC, the national cycling charity
October 2012

[5] Bowles Green Ltc. 2008. *Engaging Ethnic Minority Communities in Cycling – Consultants' Report.*
[6] DfT. 2012. *Public Attitudes to Transport.* Table ATT0322.

Push Bikes' submission to Birmingham City Council's Transport, Connectivity & Sustainability Scrutiny Committee.

Preamble:

As one world-famous cycle campaigner has said, on his experiences of cities abroad:

“[Copenhagen] is fantastic. And best of all: there are no bloody cars cluttering the place up. Almost everyone goes almost everywhere on a bicycle.... City fathers have to choose. Cars or bicycles. And in Copenhagen they've gone for the bike.... The upshot is a city that works. It's pleasing to look at. It's astonishingly quiet. It's safe. And no one wastes half their life looking for a parking space. I'd live there in a heartbeat.”

(Jeremy Clarkson, in The Sunday Times, 8th April, 2012.)

Building a city that cycles requires a choice to be made – a choice to encourage the use of bicycles – a choice that the whole city buys into. Building a city that favours bicycles does not need to be expensive, especially when factoring in the cost benefits of a high level of cycling, but it requires joined-up planning and development that relies on a political choice being made.

Abstract:

The biggest barrier to a high-level of cycling is a lack of long-term, joined up, planning for bicycles. Political leadership is necessary to build awareness of, and responsibility for, cycling into the everyday thinking of all BCC officers. Without this buy-in, building a high level of cycling will be almost impossible.

The benefits from increasing cycling are potentially very large, with 109 new regular cyclists delivering £1 million in congestion, health and pollution benefits alone. A coherent 30-year plan for developing a close-meshed cycle network, linking in improvements for bicycles with ongoing road maintanence work, offers a very cost effective way of delivering results. With the long-term economic benefits greatly outweighing the long-term costs, delivering a **bikeable city** makes very good sense.

A key element of developing a close-meshed cycle network is to introduce a 20mph speed limit city wide (with some exceptions for main roads), along with allowing contra-flow cycling on most one-way streets and restricting through traffic in residential areas. This will deliver a road environment that is welcoming for bicycles, and make bicycles as, or more, convenient as driving a car.

High quality, dedicated, cycle provision on main roads will be needed. Flagship schemes should be targetted – particularly Bristol Road at the moment – which are more expensive, but will advertise cycling for many years. The major benefit of this will be to help non-cyclists to be able to imagine cycling as a practical and safe mode of transport – particularly non-cyclists stuck in congestion.

Junctions must also be targetted for redesigns, to provide obvious, safe routes for novice cyclists to negotiate the junctions. Designing junctions primarily to smooth traffic flow creates a deeply hostile environment for pedestrians and cyclists, and only increases traffic congestion. The safety of pedestrians and cyclists should be the primary priority for all junctions (except motorways) to reverse the shift to motor traffic that traffic smoothing has encouraged.

Bicycle hire schemes, on the Velib model, offer a very cheap way for people to try-out cycling, as well as increasing the convenience of cycling in the city-centre. A lack of secure cycle parking at home and at popular destinations, as well as a higher up-front cost than public transport, presents a barrier to trying cycling, which bicycle hire schemes can provide a solution to.

Providing cycle training to all school children is vital, but also important is promoting a culture of road safety. BCC can play an important role through setting and monitoring standards for professional drivers. Building up a support network in communities that can carry out basic bicycle maintainence is also essential, which can be done by working in partnership with leisure centres and Bicycle User Groups.

Finally, the direct benefits to retailers of a shift to bicycle use is often ignored. Setting up Bicycle-Friendly Business Districts, to encourage the use of bicycles in the daily running of businesses, as well as attracting bicycle user through special offers and services, can encourage the business community to support the shift to cycling.

Contents:

users

4.4 Build flagship cycling infrastructure on major roads into the city centre

4.5 Build secure cycle parking in residential areas

4.6 Build secure cycle parking at popular destinations

4.7 Increase permeability for bicycles – one-way streets

4.8 A blanket 20mph speed limit city wide, with exceptions only for some main roads

4.9 Reduce through traffic

4.10 Introduce short-term bicycle hire schemes

4.11 Increase the provision of medium-term bicycle hire schemes

4.12 Increase the availability of cheaper bicycles

4.13 Provide cycle training to all Birmingham school children

4.14 Provide more adult cycle training

4.15 Provide basic maintainence for bicycles

4.16 Set up local Bicycle User Groups

4.17 Set up Bicycle-Friendly Business Districts

4.18 Promote a culture of road safety

1.1 Why the bicycle?:

The benefits of encouraging cycling are numerous:

1.1.1 Increased cycling creates a more liveable city, with reduced air and noise pollution, more pleasant streets and more reliable journey times. Cyclists are not the only people who appreciate these improvements, as Jeremy Clarkson's comments about Copenhagen demonstrate. Creating a more liveable city makes the city more attractive for inward investment because of the quality of life on offer.

For example, how different Digbeth would feel if people from south of the city centre cycled through it in large numbers, rather than speeding through in cars and on trains and buses. The existing residential developments might not feel like islands in an industrial wasteland, discouraging investors.

1.1.2 Cyclists are more mobile pedestrians – increasing footfall for the shops they cycle past, and helping rejuvenate local shopping areas. Impulse buying is easier for cyclists than car drivers or public transport occupants, as bicycles can be parked more easily than cars, and do not have predetermined stops like public transport.

For example, the development centred on the Custard Factory in Digbeth has empty retail units, and is too far from the main shopping area in the Bull Ring and markets to attract pedestrians. But if 30% of the people passing it every day in cars and buses where on bicycles, the retail units would be far more viable.

Another example are the restaurants on the Hagley Road / Monument Road crossroads. These are cheaper than those on Broad Street, but the people passing them in cars and buses can not stop there easily. Again, if 30% of those people were on bicycles, the viability of those restaurants would be much improved.

1.1.3 Cycling is a great equaliser – designing a city for bicycles reduces 'transport poverty', reducing the cost of living significantly. Sustrans' recent report on Transport Poverty in England (http://www.sustrans.org.uk/lockedout) emphasises the ways in which the costs of transport are a serious burden even for households who can manage to run a car. People unable to afford a car are cut off from proper access to health care, education and jobs. Increasing cycling is perhaps the best way to tackle transport poverty.

1.1.4 Cycling is also a great equaliser for the differently abled. The paralympics showed clearly how accessible cycling is to almost everybody (http://www.guardian.co.uk/environment/bike-blog/2012/oct/02/disabled-cycling-london-2012-paralympics). Bicycles, adapted to the needs of the rider, put everyone on the same level, and encourage integration in a way that few other physical activities do. In addition, bicycles offer access to cheaper transport for almost everyone.

1.1.5 Cycling regularly improves physical and mental health, helping to cut health care costs (http://www.ecf.com/wp-content/uploads/2011/10/Cycling-and-health-Whats-the-evidence.pdf). Cycling is an ideal low-impact form of exercise which allows anybody to gently build-up their fitness levels. Building cardio-vascular fitness through exercise is more effective at reducing risk of death than losing weight through dieting, and the health benefits of cycling greatly out-weigh the risks of injury from cycling. Utility cycling – to work, shopping, visiting friends – is one of the easiest ways to build exercise into our daily routines.

1.2. Who cycles, and who can be easily encouraged to cycle?

The stereotype of a 'cyclist' is a young to middle-aged, white, male, who is physically very fit, wears lycra and rides a racing bike. While these cyclists may be more visible, as they are often confident enough to ride on main roads with motor traffic and in a dominant road position, they do not form a majority of cyclists in Birmingham.

Birmingham is a diverse city, and cyclists in Birmingham reflect that diversity. Push Bikes' experience with holding Dr Bike sessions this summer has been that there is an interest in cycling across all demographics in Birmingham – there is no typical cyclist in Birmingham. Given the right conditions, most people in Birmingham can be encouraged to cycle. Rather than target particular groups, it would be better to target particular kinds of journeys:

The aim should be to make cycling the natural choice for most journeys of 5 miles or less.

This represents a 30 to 40 minute bicycle ride, travelling at a steady speed. At this distance, cycling is often faster than waiting for a bus, and can also be as fast as a car in heavy traffic. Almost 70% of all car journeys are less than 5 miles – many of these could be made by bicycle.

However there are several barriers that need to be addressed to make cycling easier.

2. What are the barriers to cycling?

2.1 Secure and convenient bicycle parking – both at home and at desirable destinations.

Many residential areas in Birmingham are dominated by terraced housing, with difficult, inconvenient access to rear gardens. These types of houses present a problem for cycle storage – while keen cyclists may be willing to have bicycles in their halls, or hanging from ceilings, most people do not want such a close relationship with their bicycles. The streets in these areas are turned over to on-street car parking, with no provision of secure cycle parking. These problems are exacerbated where houses have been converted into apartments, where there is no space to store bicycles inside.

2.2 Cost of investing in cycling

Bus tickets for one year cost a minimum of £576.00 for one year, while a second-hand bicycle plus accessories can cost as little as £200, and be used for many years. However a monthly direct debit of £48.00 for bus tickets may be easier to manage than spending £200 at one time on a bicycle, especially if the person is unsure of whether they will like cycling or not.

Additional costs are incurred when bicycles are stolen – unlike bus tickets, they are not replaced for free. Many people who have their bicycle stolen do not buy a new one – they just stop cycling.

2.3 Poor infrastructure for cycling

This includes roads that are designed solely for motor vehicles and roads where poorly-designed or maintained cycle infrastructure can be found.

While there are cyclists who can ride bicycles comfortably in the flow of motor traffic, this requires the ability to reach relatively high speeds (20 mph+) for short distances in order to negotiate multi-lane highways and junctions designed to keep motor traffic flowing. This level of fitness and skills is rarer among children, the elderly and people with physical impairments. Even for those with high levels of fitness and skill, these manoeuvres can be very difficult, and either thrilling or harrowing, depending on the individuals' addiction to adrenaline highs.

Many more cyclists are able to cycle on the edges of existing infrastructure, through selecting good routes, and using road positioning to stay safe. However this often requires the cyclists to get off and push their bicycles, or cycle illegally on footpaths. Pavement cycling does not indicate anti-social behaviour, but rather adaption to poor infrastructure design.

Poor infrastructure leads to a loss of momentum for cyclists – where cycling infrastructure has been designed to fit around motor vehicles, loss of momentum is a major issue. Toucan, and other light-controlled crossings, often have lengthy waits, frustrating their users and encouraging crossing at the wrong times. Off-road cycle routes that break at every side road also slow down cyclists significantly, and tire them out. The effort of starting again is done by the cyclist's muscles, not a petrol engine – the extra effort of building up momentum saps energy.

There is no close-meshed network of attractive (meaning continuous, convenient, fast and safe feeling) cycle routes to enable cyclists to travel easily across Birmingham.

2.4 Lack of cycling skills

Cycling is an unknown to many people – they do not have the skills to successfully integrate cycling into their lives. Because Birmingham has a low level of cycling, individuals do not always know someone who does cycle and can assist them with starting to cycle. This lack of knowledge can be a barrier in several ways.

2.4.1 Difficulties in planning routes

Most regular cyclists are used to finding convenient, fast and more enjoyable routes to cycle. Experienced cyclists can spot cut-throughs and routes that will make their journey more efficient. However someone who drives a car or takes public transport may have no awareness of alternative routes to the main roads between their home and their preferred destinations. They will not be aware of quieter back streets and off-road cycle routes that are more welcoming to novice cyclists. Where people do not have the ability to plan better routes, this can be a significant barrier to utility cycling.

2.4.2 Maintaining bicycles

From Push Bikes' experience this summer with Dr Bike, many bicycles are unused because of simple flat tyres. Other simple repairs that prevent people cycling are

misaligned wheels and brakes, rusty or worn-out chains and seized-up cables.

These repairs are easy and low-cost to sort out, but un-economic for most bicycle shops to deal with. As a consequence, the price that bicycle shops charge for these minor repairs (in order to make them economically viable) discourages people from having the repairs carried out. In a community with a high volume of cyclists, everyone would know someone who had the tools and capability to carry out these minor repairs. But at the moment those conditions do not exist in the UK.

2.4.3 Bike handling and road awareness

Many novice cyclists do not have the skills necessary to ride on roads with motor traffic. There is a very low uptake of Bikeability training among adults in Birmingham, and not all schools in Birmingham take advantage of the Bikeability training that is on offer.

2.5 Fear of cycling

Surveys consistently report that most people feel scared of cycling on main roads in busy traffic. Push Bikes' experience is that the most common demand, particularly by non-cyclists, is for more 'cycle lanes' because the roads are too dangerous. This fear impacts decisions made both for an individual's own actions, and for the actions an individual will allow others to do – both head teachers and parents seem to be motivated by a fear to cycling in dissuading cycling by children in their care.

This fear has many roots: the presentation of cycling by popular media; confirmation bias influencing way in which real-life encounters (both as observer and participant) with cycling are interepreted; a general perception of road conditions, which influences walking as well as cycling decisions.

Fear of cycling is to a large extent mistaken. Cycling is statistically no more dangerous than other forms of transport, and the health benefits greatly outweigh the risks. On the other hand, the experience of large lumps of metal passing within 1 metre of you at a speed differential of 20 or 30mph is not pleasant. The distinction between the emotions of fear and aversion to unpleasant experiences is not easy to pin down.

Presenting solutions to the fear of cycling is not an easy task, and needs to take into account the nuances of the multiple factors feeding into that emotion.

3. What are the solutions to these problems?

3.1 Secure cycle parking in residential areas

On-street parking for 10 bicycles can be provided in the space needed for 1 small car.

The simplest and cheapest form of storage is the Sheffield stand. These are widely available and easy to install – although care must be taken to attach them securely to the ground. It is possible to install a Sheffield stand with a integral bicycle pump (http://heklucht.posterous.com/heklucht-almere-haven). There are also designs for cycle racks that provide some protection against cars, along with an integral bike pump (http://www.cyclehoop.com/products/car-bike-rack).

Bicycle racks, such as Sheffield stands, are suitable in residential areas for inexpensive

bicycles. For more expensive bicycles, cycle lockers are a good option, although they do cost significantly more than Sheffield stands.

Providing secure cycle parking can address barriers 2.1, 2.4.1 and 2.4.2, if information stands are built with the cycle stands, with maps of the local area and recommended cycling routes, plus integral bicycle pumps to keep tyres inflated.

3.2 Secure cycle parking in desirable destinations

Several new developments in Birmingham city centre are looking into the provision of 'Cycle hubs', offering a variety of services such as staffed secure cycle parking, showering and changing facilities and basic bicycle maintenance.

Major destinations offer an economy of scale that makes the provision of such services more viable. For commuters, the convenience offered by Cycle hubs may represent good value for money, especially when compared with car parking charges or other transport costs. These facilities can address barriers 2.1 and 2.4.2. They also offer the potential to address other barriers, by providing a community of cyclists in one location who can share knowledge.

However, for many cycle users, the ability to park close to any destination is more important than the security offered by Cycle hubs. For most destinations, Sheffield stands located close to the entrance are important – with a cover to provide protection from weather if possible. As noted in 3.1, these can include maps of the local area and integral bicycle pumps, to address barriers 2.1, 2.4.1 and 2.4.2.

3.3 Creating a close-meshed network of cycle-friendly routes

A well-designed network of attractive (continuous, convenient, fast and safe feeling) cycling routes could address barriers 2.3, 2.4.1 and 2.4.3, and contribute to addressing barrier 2.5. However, it must be emphasised strongly that **poor quality cycling infrastructure must not be built.**

Consistent road designs, with clear layouts, particularly at junctions, help novice cyclists to choose the safest manoeuvres (addressing barrier 2.4.3). For this reason, poorly designed and maintained cycle infrastructure is worse than no cycle infrastructure at all, when that poor quality puts cyclists in dangerous situations.

That having been said, clear, visible, 'flagship' cycle infrastructure on main roads can act as a visible aid to encourage people to try out cycling – allowing people to think **“I could cycle down this road.”** (overcoming barrier 2.5 for that route) Allowing people new to cycling to be able to imagine cycling to important destinations would significantly encourage more people to cycle, through addressing barrier 2.4.1.

One of the most important issues in designing a network of attractive cycling routes is helping cyclists to negotiate junctions safely. Even where cyclists may use minor roads for much of their journey, they are likely to encounter main roads at junctions. Promoting the flow of traffic (designing for 'traffic smoothing') often focuses on increasing the capacity of junctions on main roads – increasing the number of lanes; providing left-turn and right-turn lanes separately; putting in high volume roundabouts; removing Advanced Stop Lines for bicycles (ASLs) because they take up space for motor vehicles.

For cyclists who can not 'take the road' and behave like a motor vehicle, these 'traffic smoothed' junctions are difficult to negotiate at best, and impossible to negotiate at worst. Even for confident cyclists, crossing 2 lanes of motor traffic to enter a right-turn lane can be a difficult manoeuvre. Trying to act like a pedestrian and push your bicycle across the junction is sometimes no easier, as pedestrian light phases can be short, if they exist at all.

A network of attractive cycle routes requires junctions to be designed with safety for pedestrians and cyclists. This can be achieved through the use of ASLs, or through separate green phases for bicycles, to provide segregation in time.

Without safe junctions, there can be no continuous network of attractive cycle routes.

3.4 Bicycle hire schemes – Velib / Barclays Cycle Hire style

This type of hire scheme offers a convenient solution to barriers 2.1, 2.2, and 2.4.2. They are excellent at encouraging new people to cycle, by reducing the cost of trying out cycling, and eliminating worries about cycle theft and maintenance. Where located on quiet routes and public transport links, they can indirectly address barrier 2.5, by allowing individuals to cycle on routes they feel safe on, while using walking or public transport for sections that they feel scared of.

The cost of trying a Barclays Cycle Hire bicycle is half the cost of a single bus ticket. The impact this has on the ease of trying out cycling is bigger than any other single measure.

The mean hire distance for Barclays bikes in London is just under 2km – or in other words, from New Street Station to any location within the Middleway ring road. The mean hire duration is 15 minutes. A cycle hire scheme on the Barclays Cycle Hire model would not only enable an increase in cycling in Birmingham city centre, but would also help with the regeneration of the city centre, by increasing the speed and reliability of transport links from the main stations to areas such as Digbeth. Driving a car, or taking public transport from one side of the city centre to the other is not simple and easy, but hiring a bicycle and cycling would be simple and easy.

Extending a cycle hire scheme like this into the residential areas immediately outside the Middleway ring road would enable people to cycle into the city centre, rather than taking buses. A 40 minute walk only takes 15 minutes on a bicycle, which makes cycling more attractive than public transport or driving a car.

3.5 Bicycle hire schemes – medium term hire

There are a couple of medium term (up to 6 months) cycle hire schemes in Birmingham – Castle Vale Cycle Loans, which uses recycled bicycles; Bike North Birmingham, which also uses recycled bicycles. These two schemes are free of charge, and offer a way for people to try out cycling without having to make a large investment up-front. While these are very useful schemes, they only address barrier 2.2. They need to be combined with improved secure cycle parking in residential areas and popular destinations, as they have the same issues as privately-owned bicycles.

3.6 Alternative ways to purchase bicycles – Cycle to Work scheme

An additional way to address barrier 2.2 is through schemes that spread the cost of buying a new bicycle over 1 or 2 years. The Cycle to Work scheme has been adopted by many

companies in Birmingham, and, belatedly, BCC.

A major issue with the scheme, however, is that many low-paid workers are excluded because they are on temporary contracts or working through agencies. And students and the unemployed are excluded completely. Ironically, the people who most need access to ways to spread the cost of investing in cycling are those who can not access these schemes.

The private sector has done well in extending the Cycle to Work scheme to many employees, but now the state and voluntary sectors may be needed in finding alternative ways to purchase bicycles to excluded groups.

3.7 Cycle training

Barriers 2.4.1, 2.4.2, 2.4.3 and 2.5 can all be addressed through cycle training schemes.

Bikeability training is offered across Birmingham, but is not accessed by all schools in Birmingham. There is evidence that children who receive bicycle training at school are more likely to cycle as adults, and in the Netherlands all children receive cycle training and broader road safety training. Providing cycle training to all children is an important part of long term building of a broad cycling culture.

Bikeability training for adults in Birmingham is also offered. The experience of Push Bikes, however, is that adults may be less likely to accept the need for cycle training. Some adults have commented that 'if they have to think about cycling, instead of just enjoying it, they won't do it.' It may be that formal bicycle training may alienate some adults – in which case they might be better reached through other cycling activites, such as group rides or maintanence workshops, which include advice about riding skills as asides.

Maintenance training is also essential for building a wider cycling culture. There are organisations in Birmingham that offer maintenance training, such as the Birmingham Bicycle Foundry and Bike North Birmingham. These need to more widely publicised and encouraged, to build up the numbers of people who are able to maintain bicycles and support cycling in their communities.

3.8 Introducing 20mph speed limits and reducing through traffic - 'rat-runs'

Barriers 2.3, 2.4.3 and 2.5 can be addressed by these measures, and measure 3.3 can be assisted.

For most of the highway network, a speed of 20mph is more appropriate than 30mph. Traffic collisions are less fatal at this speed, and with on-street parking, high density residential areas, and a busy town centre, 20mph is a safer speed for observing and reacting to hazards.

Introducing a maximum speed of 20mph will not significantly change average speeds through much of the city – instead excessive acceleration and braking will be reduced. Stopping at junctions already limits the average speeds in Birmingham – accelerating to hit the 30mph speed limit in between junctions is simply wasteful driving.

Having a 20mph speed limit changes the calculations of motor vehicles encountering bicycles on the road. With a bicycle travelling in front at 10mph, overtaking to achieve a

top speed of 30mph appears to be a rational choice, whereas overtaking to achieve 20mph does not provide such apparent benefits.

Reducing through traffic, by reducing the speed to 20mph and using one-way streets and road closures, also benefits local residents and cyclists. With careful planning, cyclists can continue to use the streets at the same speed, but enjoy a quieter road environment. Local residents will have less air and noise pollution, as well as having streets that are more people friendly – increasing community ties (see http://www.carfreeday.org.uk/traffic-community-research.aspx)

3.9 Promote a culture of road safety.

This addresses similar issues to that of 3.7, but from a different angle, targetting barriers 2.4.3 and 2.5. The focus lies in moving away from a transport planning system which accommodates the errors of motor vehicles in infrastructure design, to one that focuses on addressing the source of danger – the large, heavy, lumps of metal travelling at speed on the infrastructure. (http://rdrf.org.uk/road-danger-reduction/)

BCC does not have the ability to create new laws regarding vehicle behaviour, but BCC does have the ability to influence the enforcement of existing laws, which currently are ignored to a large extent, as well as set standards for their contractors.

4. How can these solutions be implemented by BCC?

The discussion of implementation by BCC will include discussion of partners that can be involved, and the resources that may be needed.

When resources are being discussed, however, it is important to note that an increase of just 109 additional people cycling at least 3 times per week generates benefits in reduced congestion and pollution, and increased health, worth £1 million. (Adrian Lord, http://www.cyclenation.org.uk/papers/0911notts/0911-1.pdf)

Resources spent on increasing cycling bring measurable savings in other areas of public expenditure, while resources spent on 'traffic smoothing' mainly bring increased volumes of motor traffic, rather than reducing congestion.

Investment in big public transport infrastructure schemes such as the extension of the Metro to reach New Street Station is measured in the hundreds of millions of pounds – these schemes are admirable and praiseworthy, but a fraction of that money spent on bicycle infrastructure could create a high quality network of routes across the whole of Birmingham, directly benefiting every single Birmingham resident.

There is great cynicism in the cycling community about the commitment of national and local government and bodies such as Centro to increasing the use of bicycles. When the resources spent on 'traffic smoothing' and big public transport projects dwarf that spent on improving cycling, that cynicism seems well justified.

- Billions of pounds have been spent on improving Birmingham's highways to meet the needs of motor traffic, resulting in even higher numbers of motor vehicles being used, often still stuck in congestion.

- Hundreds of millions of pounds have been and are being spent on improving public transport in Birmingham, with considerable success, as demonstrated by the high numbers of people using public transport.

- A few million pounds have been spent on improving conditions for Birmingham's highways to meet the needs of bicycle users, with the result that few people ride bicycles.

This result is not particularly surprising.

So, how can the proposed solutions be implemented by BCC?

4.1 Ensure that the whole of BCC, both councillors and officers, buy into encouraging cycling, and are accountable for the influence that their jobs have on cycling conditions

Resource implications – Minimal. The biggest cost is training sessions.
Partners – Cycle campaign groups, such as Push Bikes, the CTC, Sustrans; Outside experts, such as ARUP and the Dutch Cycling Embassy

This is the most important step to be taken to achieve a high level of cycling in Birmingham.

Two recent examples bear this out:

- The 'cycle' lanes on the Selly Oak bypass were designed without any apparent consultation of cyclists. Push Bikes has been told by traffic engineers involved in this project that they did not have any guidelines for what cycle infrastructure should be like. That they did not make the effort to find out illustrates the general attitude to cycling among many BCC officers.

- The new Morrisons' development next to Five Ways included the removal of a dropped-kerb that facilitated the transition of cyclists from the key infrastructure under the Five Ways roundabout onto Hagley Road. The solution, after this issue was raised by a cyclist, was to designate the pavement a shared path. In other words, to make no design concessions for the needs of bicycles, resulting in a bodged solution that is unsatisfactory for pedestrians and cyclists.

Enquiries made to BCC about infrastructure relating to cycling are routinely routed through a couple of 'cycling' officers – who presumably then liaise with the department that was originally contacted in order to find out an answer.

This is not only a gross waste of time and resources, but serves to enforce the impression that 'cycling is the lowest priority' and 'a problem for someone else, not me'. If there is not acceptance by the whole of BCC that cycling is their responsibility, then the rest of the recommendations in this report may as well be ignored as well.

These are some minimum requirements:

(1) Highways and planning officers need regular staff development sessions focusing on the impact that their jobs have on cycling, and the ways in which infrastructure can be altered to facilitate cycling. Some of these staff development sessions must

include cycle training and cycle tours of infrastructure.

(2) Clear design standards need to be set for infrastructure, which are published and publicly available to private developers and contractors, and for the electorate. These design standards need to be regularly reviewed, with input from people who use bicycles.

(3) Measurable targets need to be set, which individual BCC departments can be held accountable for. These targets must include the quality of infrastructure (measured against the design standards), and not just the quantity of 'infrastructure'. These targets need to be made publically available, so that the electorate can measure the success of BCC departments.

(4) Create a clear 30-year masterplan for cycling routes in Birmingham, against which all infrastructure works must be compared. This must be publically available, so that the electorate can measure the progress of BCC in achieving that plan.

These measures require strong political leadership from councillors to ensure that BCC officers take them seriously.

Push Bikes is very pleased to note that several prominent councillors are strong supporters of increasing cycling in Birmingham. Our message to other councillors, however, is that we believe all councillors should come out strongly in favour of cycling – this is not an issue that can be left to only a few councillors, no matter how prominent they are.

Push Bikes will continue to push for all councillors to support the growth of cycling, and educate councillors on cycling issues.

4.2 Include infrastructure improvements for bicycles in the rolling highway repairs programme.

Resource implications – Minimal, absorbed in the maintanence budget and spread over a long period.
Partners – AMEY, and sub-contractors

This depends on the 30-year masterplan recommended in 4.1, and requires the buy-in of the Highways department in BCC, in order to maintain the long-term focus required for this to work.

The rationale behind this is that the cheapest time to introduce changes in infrastructure is when other major work on that infrastructure is being carried out. The materials and workforce are already in place, the road closures have already been planned and much of the infrastructure will already have been planned to be torn up in the process. This is the best way to build a cycle-friendly close-meshed network, although for extended periods of time, parts of the network will be unavoidable disjointed. The existence of a 30-year masterplan is essential for ensuring that disconnected sections are eventually joined up, and in convincing the cycling community that this is not just the same old disjointed bones of a network.

It needs to be noted that much of the infrastructure to be used already exists. No wide-spread expensive alterations to accommodate bicycles are needed on the majority of residential streets – instead rather there will be cheap changes that can be made, through changes to parking, priorities and signs, which can have a big impact on the experience of cycling on these streets. Expensive alterations may be needed on main roads, but these

will generally be the exception rather than the norm. The main obstacle is a lack of joined-up planning.

4.3 Redesign junctions to create clear, consistent and efficient solutions for bicycle users.

Resource implications – Expensive highways work. This can be off-set by either: national government funding for dangerous junctions improvements; incorporation into ongoing infrastructure maintanence.
Partners – AMEY, and sub-contractors; National government (funding); Centro

This is separate to point 4.2, because junctions represent the biggest risk to bicycle users, and are therefore higher priority. Because junctions potentially take bicycle users across the paths of motor vehicles, particular care must be taken with junction design, as mistakes will result in accidents.

The provision of ASLs is the minimum standard for junctions, and may not even be an acceptable minimum where cyclists need to turn right across several lanes of motor traffic. Junctions designs that provide segregation in time (through separate light phases) for cyclists may be more appropriate.

The most important thing is that novice cyclists can easily understand the junction, and take the safest route across, while drivers of motor vehicles are able to accurately predict bicycle users' behaviour at the junction.

4.4 Build flagship cycling infrastructure on major roads into the city centre.

Resource implications – Expensive highways work, but already off-set by ear-marked funding, such as that for Bike North Birmingham, and the money available through Centro for the Bristol Road, Pershore Road and Warwick Road corridors.
Partners – AMEY; Centro

This, again, is separate to point 4.2, because of the benefits presented by early flagship projects.

The pot of money available for Bristol Road, Pershore Road and Warwick Road represents an opportunity to set a high standard for cycle infrastructure, to show that BCC can design for bicycles and is taking bicycles seriously. Because of the width of the pavements on Bristol Road and the comparatively low number of side roads, it represents an excellent opportunity.

Flagship cycling infrastructure is important because of its visibility. The Rea River route is a very popular route for cyclists, but is not well known as a cycling route for non-cyclists because it is not on a main road. Bike North Birmingham is wonderful, but Push Bikes discovered that many people in New Oscott did not know of its existence. Having highly visible, high quality, cycling infrastructure on Bristol Road – and joining it up with the city centre – would have the potential to attract a lot of new people to cycling.

It is not necessary to have high volumes of highly visible cycling infrastructure (indeed, as noted in 4.2, much of the network will consist of residential streets), but it is necessary to have at least some, in order to introduce the possibility of cycling into the minds of people stuck in congestion on Birmingham's main roads. Money invested in high-visibility flagship projects directly advertises cycling for as long as it exists – it is an investment that keeps

on giving.

4.5 Build secure cycle parking in residential areas

Resource implications – low to medium, possibly offset through advertising revenue or electricity generation
Partners – Amey; Advertising companies; Electricity companies; local residents; employers

This work would also need to be carried out outside of the maintanence schedule, as residential roads are not renewed as often as busier roads.

Advertising opportunities could be created, especially if information stands are installed at the same time, although these might not be considered appropriate in the many conservation areas in Birmingham.

There are electricity companies who offer to install free solar panels (http://www.uswitch.com/solar-panels-home/free-solar-panels/) for residential properties. Covered cycle storage, next to lamp-posts for easy access to the mains network, may be attractive as sites for solar panels, with the company offsetting the cost of installing the parking. There are also companies selling canopies with PV cells installed (for example: http://www.ablecanopies.co.uk/faraday-solar-canopies-c-764.html) with a potential return on investment of about 20 years.

One benefit of installing PV panels on bicycle shelters could be the provision of charging points for electric bicycles. This would be increasingly popular as electric bicycles become cheaper, and would represent a better investment than electric car charging points.

For bicycle lockers, it may be more appropriate to offer subsidised prices to local residents, or offer rental schemes, rather than BCC covering the whole cost of the locker. As individual lockers would be available to only 1 person or household, it would be impractical to offer to all residents for free, so some form of rationing mechanism would be necessary. It might be possible to encourage employers to subsidise individual lockers for their employees as part of packages to facilitate cycling to work.

4.6 Build secure cycle parking at popular destinations

Resource implications – medium, possibly offset through advertising revenue, or through parking charges
Partners – Amey; Advertising companies; employers; local businesses; Centro

This work is not included as part of the maintanence schedule, since many of the sites will be on privately owned land, or off the highways.

Advertising revenue could be used, as discussed in 4.5, with the advantage that there will be fewer planning objections to advertising at these sites. On private land, most of the costs would be borne by local businesses and employers. It may be necessary to convince businesses of the financial benefits of cycle parking for them.

Some destinations, especially for commuters, may be viable locations for cycle hubs – which could be supported by Centro or run by private businesses. Local employers may be persuaded to subsidise the use of cycle hubs by their employees, as part of schemes

designed to encourage cycling to work.

4.7 Increase permeability for bicycles – one-way streets

Resource implications – low to medium
Partners – Amey

Recent changes to DfT guidelines have made it easier to allow contra-flow cycling on one-way streets.

Many one-way streets are wide enough to accommodate contra-flow cycling comfortably, although clear signs are necessary to prepare road users for the presence of bicycles.

On some one-way streets, on-street parking has restricted the width of the roads. In some cases, moving the parking bays to cushion the contra-flow from on-coming motor traffic may be appropriate. This would be more expensive.

This measure fits in well with 4.8 and 4.9 – 20mph speed limits and reducing through traffic.

4.8 A blanket 20mph speed limit, city wide, with exceptions only for some main roads.

Resource implications – medium
Partners – Amey; Centro; pedestrian campaign groups

This change would benefit from the cost implications of being city-wide. Rather than paying for 20mph signs for individual zones, signs would be concentrated at the junctions between the exempted main roads and the rest of the highway network. An additional benefit would be that a blanket speed limit would cause less confusion than a patchy implementation, and so encourage better compliance with the new speed limit.

4.9 Reducing through traffic

Resource implications – low to medium (depending on measures used)
Partners – Amey; pedestrian campaign groups; local residents; Sustrans

This change can be simply effected by the smart use of one-way streets and road closures. It has already been used successfully in many roads in Birmingham, but needs to be more widely used – the goal should be to have roads for travelling between different areas, and roads that are used only for reaching destinations within an area.

By increasing the time required for short, local journeys by car, while keeping longer journey times by bus and car constant, walking and cycling will become more attractive choices for local travel. High volumes of short car journeys, which add to congestion and slow down bus routes, would be replaced by cyclists and pedestrians – a win-win situation for everyone.

Enforcement of 4.8 and 4.9 may be better carried out through the use of clear signs and traffic cameras where possible, rather than infrastructure such as speed bumps, which can create problems for some bicycles, especially tricycles, and lead to increased cycling accidents.

Measures 4.7 and 4.9 depend on the development of a clear 30-year plan for cycling infrastructure, in order to properly plan these traffic reduction measures. The roads where these measures are carried out will form a large part of a close-mesh cycle network, and will not require more expensive measures such as separate bicycle lanes if the traffic reductions are effective. Over time, many of the main routes for bicycles may separate from the main routes for motor traffic, as these measures facilitate the smooth flow of cycle traffic and discourage motor traffic.

4.10 Introducing short-term bicycle hire schemes

Resource implications – high, but might be offset by private investment
Partners – Centro; Private companies (see below); employers and businesses

This could have many benefits for Birmingham, but does represent a substantial investment.

In Paris, JCDecaux finance the Velib scheme, in return for advertising rights. In London, the cost of the 'Barclays' Cycle Hire is only partially covered by Barclays – perhaps a less financially practical example.

A German company, Nextbike, runs and finances cycle hire schemes from city-wide schemes to schemes just for one business. This model may be worth investigating, to see if employers and businesses could be brought in to support the initial set-up of limited cycle hire schemes.

In the long run, short-term easy cycle hire would make a valuable contribution to Birmingham's economy, and so the options are well-worth investigating.

4.11 Increasing the provision of medium-term bicycle hire schemes

Resource implications – low to medium
Partners – Charity and voluntary sector; Centro; Sustrans; NHS

These schemes are very useful, particularly for people who may not have the funds to spend on a new bicycle.

A particularly good way to expand these schemes maybe to involve the NHS, and have doctors prescribe cycling as a low-impact form of exercise. The provision of a loan bicycle for 6 months, with perhaps some cycle training and route planning, could be a good way to facilitate the up-take of cycling for groups where the health benefits would be greatest.

4.12 Increase the availability of cheaper bicycles

Resource implications – low
Partners – Charity and voluntary sector; bicycle retailers; educational institutions; employers

Schemes like Cyclechain's refurbishment workshop are a good way to provide cheap refurbished bicycles. Cyclechain is already working with local universities to provide bicycles to students. Other charities, such as the Birmingham Bike Foundry, also provide refurbished bicycles.

While there is space for this provision to grow, many of the bicycles come either from private donations of unwanted bicycles or from police auctions of unclaimed bicycles. These sources are not sufficient to satisfy potential demand for cheap, practical, bicycles.

It is informative to look at the bicycles for sale on the British and Dutch Halfords websites. British cycle retailers survive by their profit margins on low-volume, high-value specialist bicycles. Dutch cycle retailers deal with high-volume, low-value utility bicycles. This is not a criticism of British cycle retailers – they sell to the British market. However the effect of this does impact the availability of cheap bicycles in the UK.

It might be worthwhile investigating the economics of mass orders of cheap utility bicycles, with pre-orders put in through employers and educational institutions, to compensate for this problem with the British cycle market.

Although BCC may take a role in initiating discussions, it is not suggested that BCC be involved in the purchase, other than as an employer. This is a solution that is best left to negotiations between the buyers and bicycle retailers, once the initial idea has been presented. However, offering the opportunity to purchase cheap, reliable utility bikes to BCC employees through the Cycle to Work scheme may be quite popular.

4.13 Provision of cycle training to all Birmingham school children

Resource implications – medium
Partners – Birmingham schools; Bikeability; Sustrans; logistics companies

This is an important measure whose cost will unfortunately be ongoing every year, but which is important. The easiest time to reach large numbers of people with cycle training is when they are at school. On its own, cycle training will not create a mass cycling culture, but it is pivotal in creating a safer cycling culture.

It would be a good idea to include cycle training in a wider road safety awareness programme. Recently logistics companies have been involved in providing heavy goods vehicles for awareness raising sessions for cyclists – although the lessons learnt are highly applicable to walking and driving as well. Another example is that in the Netherlands, school children are taught to open car doors with the hand furthest from the door, which encourages them to look out of the car before opening the door. This improves their safety on the road, as well as benefiting other road users. The goal of a programme like this is to build a culture of road safety that develops awareness of the implications of everyone's actions in all modes of transport – rather than teaching children solely how to adjust their bicycle riding to compensate for other road users' behaviour.

Currently not all schools and head teachers are keen to provide cycle training, so political leadership by BCC is necessary to ensure the comprehensive provision of this vital service.

4.14 Provision of adult cycle training

Resource implications - low
Partners – Voluntary and charity sector; Cycle groups; Bikeability; Sustrans; Leisure centres; Employers; CTC and British Cycling

This includes both cycling skills and maintainence skills.

As adults may feel that they do not need cycle training, or may be embarrassed to ask for it, it is important to target adults at locations where they will be interested in exercise – such as leisure centres – or in social situations – such as with cycle groups – or where cycle training may represent a positive reward – such as during work hours.

Convincing employers of the benefits of actively encouraging their employees to cycle to work (in addition to providing the Cycle to Work scheme) could result in employers being willing to offer a few hours from work time for cycle training – if, in the long run, the employees will have more reliable commute times and less sick days, as well as being more alert and productive at work.

4.15 Provision of basic maintainence for bicycles

Resource implications – low
Partners – Cycle retailers; Voluntary and charity sector; Leisure centres

Cycle retailers will not find minor repairs to be commercially viable, but the value of advertising opportunities and referrals for more complex repairs and expensive parts may make it worthwhile for them to provide free or low-cost supplies – such as inner tubes, puncture repair kits and basic tools.

Leisure centres are an ideal location for free basic bicycle maintainence, but this requires the presence of a few members of staff who are trained in basic repairs. This could be provided cheaply by local charities, such as the Birmingham Bike Foundry, or by local cycle retailers. The materials for repairs could come from local cycle retailers, in return for advertising and referrals.

In Push Bikes' experience, Dr Bike sessions at leisure centres are very popular. To provide this service across Birmingham, however, the leisure centres need to organise these themselves.

4.16 Setting up local Bicycle User Groups

Resource implications – low
Partners – Voluntary and charity sector; local residents; employers; community centres and leisure centres (for facilities and storage); national cycling groups – Sustrans, CTC, British Cycling

Helping local residents, or employees in businesses, to set up Bicycle User Groups (BUGs) would assist in measures 4.15, 4.14, 4.12 and perhaps 4.11.

BUGs need assistance in initial setting up of the group – finding members, establishing methods of communication, finding out what resources there are in Birmingham, finding a storage place if there are communal tools, etc. - and also in publicising the existence of the group to local people who might need support from the BUG to cycle.

They can be very useful in creating a cycling community for new cyclists, with a shared pool of knowledge and experience. As there is such a low level of cycling in the UK, there is limited social network support for many new cyclists – BUGs help to bridge that gap.

4.17 Setting up Bicycle-friendly Business Districts

Resource implications – low
Partners – Businesses; retailers; employers; Sustrans; Birmingham LEP and BCG, etc.; bicycle deliver companies

Retailers and businesses need to be helped to see the connection between supporting local shops and the use of bicycles. Bicycle-friendly Business Districts (BFBDs) are areas where businesses work together to create an area that is attractive to cycle to, and where the businesses also use bicycles for utility purposes (www.transportissuesdaily.com/emerging-trend-bicycle-friendly-business-districts).

These are a combination of measures to target customers – cycle parking, basic cycle maintainence, discounts for cyclists – and use of bicycles by local businesses – for commuting, small to medium deliveries, going to business meetings.

Encouraging cycling would create good advertising for the local businesses, as well as creating a local atmosphere that was conducive to leisurely browsing and impluse buying – streets with high volumes of motor traffic and on-street car parking, do not lead to high sales.

It seems that businesses in Birmingham often are missed out of cycle issues, and the benefits of increased cycling are not explained to them. There would be benefits to convincing Birmingham businesses that cycling is good for business.

4.18 Promote a culture of road safety

Resource implications – low
Partners – BCC contractors; All companies using professional drivers; insurance companies; Bikeability; motoring bodies, such as the AA.

The behaviour of motor traffic can have a very strong influence on the perceptions of the dangers of cycling that the public has. Training professional drivers in considerate driving techniques, and holding them to account for their driving standards, has a large role to play in changing the behaviour of motor traffic. Advances in technology has made monitoring of driving standards much easier than even 5 years ago. Insurance companies are rolling out devices that monitor the standard of driving of a vehicle, allowing the company to modify insurance premiums to match the statistical risk of those driving patterns. Many people are also taking high-quality video cameras onto the roads now, recording vehicles' behaviour – eliminating reliance on possibly biased and unreliable eye witness statements.

It should now be possible to set meaningful driving standards that will improve safety for other road users and properly monitor them. BCC could insist that their contractors adopt these standards, train their drivers and monitor their driving. This would be an important shift away from policies of accommodating driver errors in road design (which results simply in more risk taking) to placing the onus for safety onto the vehicles that present the danger. Providing cycle training is important, but focusing only on that is a form of victim-blaming.

Push Bikes manifesto, 2012.

Birmingham City Council has laid admirable plans for the regeneration of the centre of Birmingham in its Big City Plan, with it's aim to make it a 'walkable city'. However, Push Bikes believes that we must also make the whole of Birmingham a 'bikeable city'.

The bicycle is the most energy efficient form of transport we have (and will ever invent), and should play a core role in reducing CO2 emissions and air pollution. A 'bikeable city' would be a cleaner city, and offer us the greenest future.

The bicycle offers a freedom that public transport does not, with no waiting times, no changes and a door-to-door service. Bicycles are ideal for shorter trips under 5 miles, while bicycles and public transport complement each other perfectly for longer trips, where the bicycle can bridge the gap between public transport terminals and the start and end points of journeys. The bicycle can also alleviate congestion, by reducing the number of motor vehicles on the roads.

The bicycle is a healthy form of transport. It is a low-impact form of exercise, and can be as intense as the rider chooses. Each year, the problems associated with obesity cost the UK billions of pounds.

The bicycle is cheap. A good new bicycle can be bought for less than the cost of a 1 year bus pass, and on-going costs will be under £100 per year. Increasing bicycle use can have a significant positive impact on the finances of families in Birmingham.

A 'bikeable city' would provide immense benefits to Birmingham. Push Bikes believes it is time for Birmingham to shift priorities from the car to the bicycle.

Manifesto demands:

Birmingham City Council should adopt 'a bikeable city' as a strap line, to put the bicycle at the front of BCC transport policy.

Birmingham City Council should prioritise creating a safe and attractive environment for bicycles above maintaining capacity for cars.

Residential neighbourhoods and shopping areas should be made people friendly by introducing and enforcing 20mph speed limits and reducing through traffic.

Aspirational plans for a network of continuous, attractive and convenient cycle routes covering Birmingham should be developed and its construction prioritised as part of the on-going work on Birmingham's transport network.

Ladywood Infrastructure Safari – 9th Sept 2012

Key points:

(1) To encourage cycling, we need a network of roads that provide a welcoming environment for cyclists.
(2) To build a network of welcoming roads, BCC needs to have an aspirational strategic plan of what that network should look like in 20 or 30 years time. All departments of BCC need to know what that plan is, and be responsible for implementing it.
(3) Minor roads, with low volumes of motor traffic, can provide a lot of that network. A blanket 20 mph speed limit would help to make those roads more welcoming, as well as restricting rat-runs.
(4) But there is no alternative to many main roads – space needs to be created for bicycles on these roads.
(5) The designs for all road junctions must first consider how pedestrians and bicycles can easily negotiate them. After that, 'traffic smoothing' can be considered. Junctions should never be a barrier to cycling or walking.

Start point – Jupiter, Sherborne Street.

(1) Shyltons Croft & Graston Close:

Good points – The design of this development shouts 'residential'. Kids play on the street in a way that I haven't seen since my childhood. This works because it is not a through street, is small enough for all residents to know each other, and the road has been turned into a 'shared space'. Car drivers have to look out for their neighbours and their children.

Creating spaces like this that scream 'residential' can help families reclaim their streets – but care needs to be taken over controlling through traffic. Spaces like this will encourage cycling as an activity. Cycling will be just as fast as driving a car, but much more pleasant. The slow speed of cars will remove any dangers from cars.

Introducing 20 mph residential areas, and tackling 'rat-runs', would be two good first steps towards this.

Bad points – The lack of double yellow lines (perhaps for aesthetic reasons, or social engineering) means that local workers use this road as a free car park. This detracts from the welcoming feeling of the development.

Although pedestrian permeability has been designed in well, the connection to the cycle path down the side of the park has been neglected. There are no dropped kerbs to help cyclists transition from the development, over the footpath and onto the cycle path.

(2) Morville Street cycle route (connecting the two halves of Morville Street where traffic is allowed)

This is a cycle path, although it has no signs on it to make it as such. At Ryland Street there is a dropped kerb to help cyclists access the path, but at the Gilby Road / Rushton St end there is no dropped kerb. A dropped kerb could be put in at the end without worrying about cyclists riding

straight into oncoming cars, due to the layout of this junction.

(3) Rushton Street (From Morville Street up to Friston Avenue)

This is a quiet one-way street. This could be made 2-way for bicycles – dropped kerbs on either side of the build-out at the Morville Street junction could allow bicycles to by-pass the 'No Entry' signs. This does not need to be as over-engineered as Grosvenor Street West.

The street is quite quiet and wide enough, so there should be no need for a contra-flow cycle lane, as there is on Grosvenor Street West. This could be handled in the same way as Hurst Street next to China Town.

(4) Friston Avenue / Rushton Street junction (Pedestrian issue as well)

This appears to be a 'minor' street, but is very busy. Grosvenor Street West is used to access this street, and then onto the ring-road, to by-pass Five Ways island. In addition, there is a large amount of traffic accessing the Tesco store. This is an intimidating place to cross the road, but it is a major desire line from the Jupiter development (and beyond) to access Tescos and Broadway Plaza.

If I was planning to cycle from Lighthorne Ave / Kilby Ave (for example) to Tesco, it would be this junction that would put me off, along with the intimidating environment of Friston Ave.

A bold design would be to connect Friston Avenue straight to the houses opposite, and have 'give way' signs for Rushton Street. Cyclists would cycle straight from the cycle paths onto Friston Avenue, while cars would need to give way, and check for cyclists.

Less controversial steps would be to put in a zebra crossing for pedestrians next to Friston Avenue (not halfway up or down Rushton Street). Pedestrians (of which there are many) could walk straight across the street, while cyclists would benefit from the slowing effect that the zebra crossing would have on traffic.

It would also be useful to put in proper parking spaces for residents cars, so that that short stretch of street does not feel like a car park. At the moment the parking is not 'legitimated' and so spreads out across the whole street, creating a less welcoming environment.

(5) Grosvenor St West Contra-flow cycle lane.

This is a wonderful design, and very useful. It shows that there are individuals in BCC who know how to design for bicycles.

Unfortunately, at Sheepcote Street, there is no link up with a cyclist desire line through Brindleyplace. Opposite the cycle path, the pedestrian 'cage' needs to be removed, and a dropped kerb put in.

Because of the high volume of pedestrians using the light-controlled crossing (which will only continue to grow) the traffic is calmed at that point, and there is little chance of conflict between motor vehicles and cyclists crossing here. However, it might be an idea to mark a cycle-refuge in the middle of the road, next to the pedestrian island.

(6) Sheepcote Street

This is not a main road, yet it is straight, relatively wide, and clear from too much clutter. As a consequence, car speeds here are too high for comfortable cycling. If this area was part of a 20mph zone, it would not affect the average speeds of cars through this area, but would make cycling on Sheepcote Street more comfortable.

The same is true for St Vincent St, behind the NIA. This road is marked as a route for cyclists on Google Maps, but is not an attractive route because of traffic speeds and the over-sized roundabout at the junction with Summer Hill St.

(7) St Vincent St bus lane.

This bus lane is presumably intended to reduce rat-runs, but is regularly ignored. It is wonderful that it will be considered for camera enforcement.

Restrictions on through-traffic, such as this short bus lane, are very important for creating a more friendly environment for cycling. This is through two effects:

1) The level of motor traffic is reduced, so the highway environment is more welcoming
2) For short journeys, using a bicycle becomes more convenient than using a car.

In addition, by restricting permeability by motor traffic, but not pedestrians or cyclists, a network of cycle-friendly streets can be created. If this network is just as fast as the main roads, and more welcoming, it will be adopted by cyclists as their 'main roads'.

Note:

Last year (2011), it was suggested by BCC that ASLs were not needed at a light-controlled crossroads on Stratford Road because there was an alternative low-traffic route for cyclists parallel to Stratford Road. Push Bikes strongly criticised this argument, because (1) cyclists will always need to use most busy junctions, even if they are not necessarily using the whole length of the main roads, and (2) the 'low-traffic route' was simply not fit for purpose – not a direct route, much slower and with poor road surfaces.

I am not suggesting that planning a network of cycle-friendly streets removes the need to plan for cyclists using main roads – such suggestions will always be strongly opposed. What I am suggesting is that if a successful network of cycle-friendly streets is created, cyclists will naturally tend to use convenient routes that are more welcoming, and the demand for space on main roads will be less. A mass cycling culture (30 to 40% modal share of trips) would result in a demand for increased space for bicycles on urban streets. Creating a network of cycle-friendly streets that is separate from the main road network for motorised traffic would be one way of handling that increased demand for space.

A lot of main roads in Birmingham have enough space for substantial provision for cyclists (for example, Bristol Road), and for other main roads, creating the extra space for cyclists may be cheaper / easier than the works necessary to create a parallel route (such as Hagley Road). However, the creation of a proper network of cycle-friendly, reduced traffic, streets will be as essential as providing space on main roads.

(8) Ledsam Street / Ladywood Middleway junction.

This is a quiet street that offers a nice route into the city centre from Icknield Port Road and beyond. Except that the closest crossings are at Ladywood Circus and opposite Cope St, past a 'no cycling' bridge (see next point)

Hopefully, with the Icknield Port Loop development that is planned, a light-controlled crossing will be built.

This will create a direct, low-traffic, route for cyclists that will be very attractive.

The canal does run parallel to this route – but the tow-paths are narrow, with awkward bridges, mud and poor light at night. While the canal does provide a good leisure cycling route, it should not be considered a solution for utility cyclists, who require routes that can be used at any time of the day, and in any weather.

(9) Canal bridge next to Ledsam Street.

This is a good example of the poor connectivity that curses cycling infrastructure in the UK.

On either side of the bridge, the footpaths are shared use. They are not perfect, as they do not have right-of-way over side roads, and so cyclists find their trips broken up much more than if they stayed on Ladywood Middleway. However they do offer a more welcoming environment than the high speeds and level of traffic on the Middleway. They also offer cycling 'contra-flow' – cyclists can go against the flow of traffic without having to cross the Middleway or travel down to the island to turn around.

There are, however, 'cyclist dismount' signs on the bridge because the footpaths are (rightly) considered too narrow for a shared use path.

The irony is that this road has no lack of space – there is plenty of space in the central reservation. However taking out part of the central reservation, to either widen the footpath or create a substantial cycle path on the road, has not been done. Perhaps it is considered too expensive?

Ideally, issues like this need to be identified by the Highways Department, and then factored into their plans for future spending on highways maintanence and improvements.

This is where joined-up planning for not only motor vehicles but also bicycles and pedestrians is needed, but is sorely lacking in BCC.

This bridge will be a major part of any future cycle network – the other bridges crossing the canal and railway are too far away to reasonably expect cyclists to detour to use. The provision for cyclists here, if not improved, will be a significant inconvenience to cycle use, and so will reduce cycle use. It is imperative that money is spent to improve it, and the work is done well.

(10) Cope Street / Eyre Street.

When I go to City Hospital, I use these two streets. They have a low volume of traffic - I can only assume that the flow of traffice from Ladywood Middleway on to Spring Hill is sufficiently smooth enough that Cope Street does not offer significant time savings to become a rat-run.

In order to encourage more cycle use of these streets, the transition from the shared path on Middleway onto Cope Street needs to be smoothed out. If the bridge had a shared-use path, then extending the cycle route across the junction would have the dual effect of easing cycling along the shared path while facilitating the transition on and off Cope Street.

The same could be done at the end of Eyre Street.

(11) Spring Hill

This is a fast dual carriageway that is the only route across the canal between Icknield Port Road and Western Road. This is one example of a main road where a parallel quiet route will not (can not) be developed.

There is no choice but to make substantial provisions for bicycles on this road.

There is no space on the existing road to provide cycle paths and keep two lanes of traffic in both directions. The existing lanes on the road are only just wide enough for cars now.

There is, however, substantial space on the pavements and verges next to the road. There are building fronts that create narrower sections – of particular note is a building facade between Heath St South and the canal bridge, which may be protected by a conservation order. In other European countries, the local government would have a plan for cycle routes which would indicate where some private land needed to be purchased in order to provide space. There is no need for compulsory purchase orders, but plans should be in place, so that purchases are made when the owners are selling. Negotiations could be entered into to see if existing owners are willing to sell part of their land.

If there was a strategic plan for a cycle network in Birmingham, it would be easy for BCC to identify where land needed to be purchased, and plan for it.

Money is tight at the moment, so it may be unrealistic to expect such purchases to be made immediately – but that is no reason why a strategic (aspirational) plan could not be made.

Another issue is that any cycle routes along Spring Hill would need to be as convenient as cycling on the road – in other words there would need to be priority over the side roads.

There is sufficient space to build to Dutch standards along this road. The streets on the canal side of the road are sufficiently quite that there would be few issues. On the other side of the road, placing cycle routes across the road could help to delineate the residential area boundary. This could help

with keeping speeds lower and reducing rat-runs in that area.

There is a lot of traffic down Spring Hill into the centre of Birmingham. Creating a cycle-friendly environment on Spring Hill would be an important part of helping to encourage cycling into the city centre.

This is a very cyclable distance, but the road environment is deeply hostile to bicycles. This must be addressed if Birmingham is to encourage cycle use.

(12) Heath Street / Dudley Road / Western Road junction.

This crossroads actually has 5 exits – the 5th exit is a beautiful, wide, path up to the front of the Birmingham Treatment Centre. To safely access that path, though, it is necessary to go 200 meters up the road to a light-controlled crossing.

There is no provision for cyclists or pedestrians on this crossroads. Crossing Western Road is a hazardous undertaking – it has no crossings for pedestrians or cyclists along its whole length – this is crazy for a busy road that is between a hospital and the residential areas on the other side of the canal.

Actually crossing Dudley Road there is highly inadvisable – several times I have waited for 5 minutes for a gap in traffic there, and each time I have given up and gone up to the light-controlled crossing.

This is 'traffic smoothing' at its most hostile. At this junction, everything else has been sacrificed in order to cram through as much motor traffic as possible. Junctions like this supress active travel (walking and cycling) because they make short trips dangerous and unwelcoming. By smoothing the traffic, a road environment is created in which the only sensible mode of transport is motor vehicle – car if you can afford one, otherwise bus. The traffic smoothing is creating more motor traffic by supressing other modes of transport.

Conversely, by enabling short trips (5 miles and under) to by made by bicycle, traffic volume could be substantially reduced – in turn reducing the need for 'traffic smoothing'. The self-perputating circle needs to be broken, and junctions like this are the places to start.

(13) Lee Bridge

Aberdeen Street could provide a quieter route for cycle traffic which could link up with the route through the Icknield Port loop development. However, the two closest light-controlled crossings are in the wrong places to facilitate that route.

A strategic plan for a cycle network would include a note to consider the possibility of putting a Toucan crossing on Lee Bridge to connect that route together.

Without a strategic plan, the two different roads may get some work done to make them more cycle friendly, but that would not create a cohesive network. A strategic plan is needed, so that each piece of work on the highways can be compared against that plan, and understood as part of the overall network.

We need to not only be thinking about current needs, but planning ahead for future possibilities. Otherwise we can not achieve a good network.

(14) Marroway St

A well-intentioned road blockage, which unfortunately also blocks cycle traffic. It would be a simple job to put in some dropped kerbs at either end to increase permeability here. A wide dropped kerb would be necessary, perhaps, because of issues with cars being parked at the end of the street.

(15) Summerfield Crescent vs. Selwyn Road.

Would any residents of Selwyn Road support the removal of the barrier across the Gillott Road end, and the re-introduction of through traffic?

Would Summerfield Crescent benefit from removing through traffic?

Although the barrier at the end of Selwyn Road is not ideal for bicycle permeability, the experience of cycling down Selwyn Road is much better than that of Summerfield Crescent. Restricting through motor traffic to main roads, while allowing permeability for bicycles, can create ideal conditions for encouraging cycling.

A good argument could even be made for closing off Gillott Road to through traffic as well – re-directing through traffic onto City Road and Rotton Park Road. This would create an ideal low-traffic route from Hagley Road through to City Hospital for bicycles.

Encouraging active transport requires making short journeys more convenient and pleasant by foot or bicycle – which means creating roads like Summerfield Crescent, Vernon Road and Clarendon Road. Residents living on roads already like this would create an uproar if it was suggested that through traffic should be allowed back. BCC needs to be brave enough to persuade residents on other roads that they would benefit from similar conditions.

(16) Sefton Road & Eldon Road

Another barrier to cycling is a lack of secure cycle storage. On roads like this, the houses do not have the space for storing bicycles securely. I bought my Brompton so that I could store a bicycle on a road just like this.

Yet the road is entirely turned over to parked cars. These cars are more or less secure, and people feel much safer parking a car on these streets than a bicycle.

As well as installing good quality cycle parking in shopping areas and office areas, BCC needs to think about installing cycle parking in residential areas where there is limited space for residents to store bicycles. Many of these properties are rented out, so the tenants will not have the freedom to

make adjustments to the houses to store bicycles more easily. But many of the people renting are students and young professionals – people who are easy targets for increasing cycle use.

Some good cycle parking here could easily help increase cycling rates.

(17) Hagley Road – Junction with Highfield Road & Plough and Harrow Road.

At this point there are 5 lanes of traffic, plus wide pavements on Hagley Road. The third lane on the carriageway into Birmingham city centre finishes just after this junction, after starting just before the previous junction.

Removing this third lane, and stopping left turns onto Highfield Road for outward bound traffic, would free up space for good sized bicycle lanes on either side, making this section of Hagley Road more attractive to cycle on.

Between this junction and Five Ways, the pavement is wide, and the properties all have large car-parks in front. This is a perfect situation for BCC to make small purchases of land to provide space for cycle lanes. The property owners would see increased value because of the improved bicycle links with the city centre – 10 minutes from New Street by bicycle, especially once the new Paradise Circus development is finished.

During rush hour, bicycles could quickly and safely move past stationary cars – rather than weaving through the lines of traffic. Cycling down this section of Hagley Road would become attractive to more than the young, male demographic that currently filters through traffic here in rush hour. In rush hour, there are many people catching buses from next to St Phillips College, to go into the centre of Birmingham. These people should be able to cycle that distance – they should not need to rely on public transport for such short journeys.

Gradually building cycle routes out from the centre of Birmingham, down Hagley Road, would see increasing numbers of cyclists using it. Gains could be made from even just short stretches – as long as it is faster than rush hour traffic and feels welcoming and safe.

THE BIRMINGHAM CYCLING CAMPAIGN

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Baseema Begum
Research & Policy Officer
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Thank you for the Agenda for Friday's Scrutiny Committee. You have asked for any comments to be as written submissions. I wish to comment here on two Agenda items; I will send Cllr Quinn my comments on the other items, plus the recent Cycling Forum, after I have heard the reports.

Key questions:
• How suitable are canal towpaths for cycling? What needs to be done to ensure they are both cyclist and pedestrian friendly?

Canal towpaths within the Birmingham Canal Navigations vary from the fairly good (B'ham to Worcester canal and Bham to Wolverhampton Main Line) to those in need of significant repair – the one local to me is the Grand Union. Some sections of the GU towpath have been renewed or repaired, others are almost impassable. On Friday I will be giving Tony Harvey pictures of the GU between Fazeley Street and Yardley Road.

Cyclists have these major issues with using the canal towpaths for journeys; poor, muddy, uneven or narrow surfaces, many physical barriers that force a dismount, and the frequent need to negotiate staircases to access or leave the towpath. This usually means that the bicycle has to be lifted and carried. And of course would-be commuters are deterred from using unlit towpaths at night and 'stranger danger' sometimes encountered under bridges.

Push Bikes understands that the barriers are in place to prevent the 'powered two-wheeler' so maybe these should be positioned at the access points instead of along otherwise straight stretches? Staircases could be provided with cycle 'ramps' along each side to enable bicycles to be 'wheeled' up and down more easily. Push Bikes has corresponded with the then British Waterways and BCC many times on these matters.

Key questions:
• Where are the most congested / used routes in the city and which of these could accommodate cycles? Are there safer, parallel routes which cyclists could use adjacent to these? How could these be accommodated to encourage cyclists?

The Hagley Road is a much used route into the city and it is known that many cyclists want to come into the city from the west, but are deterred by the lack of any cycling facilities on what is a busy road. Push Bikes therefore asked BCC to provide 'Shared Use' cycling on what are, for much of their length, wide footways on each side. BCC has not accepted this, due to junctions and driveways, even though there are ways of taking cycle paths safely across junction bellmouths.

Push Bikes therefore identified an 'alternative, parallel route' using the Augustus and Harborne roads. Although these are One-Ways (in opposite directions) there are ways of providing Contra-Flow cycling. Even so, BCC has to date considered these as unsuitable for contra-flow provision, even though contra-flow can now be provided simply by signage at each end.

Another busy road into/out of city is Bristol Road; Push Bikes recently met with BCC to discuss the provision of a 'Shared Use' cycle path from the ring road to Selly Oak. Ongoing.

Thank you

Yours sincerely

Graham Hankins
Secretary
Push Bikes
The Birmingham Cycling Campaign.

The Economic Benefits of Cycling
At the previous meetings of the Scrutiny Committee much of the discussion has been centred on the transport, social, and health issues and benefits. In convincing the City Council to support any increase funding for cycling the case for economic benefits needs to be forcefully made.

A very helpful guide is the CTCwww.ctc.org.uk campaigns briefing: Cycling and Local Transport which contains the following

i) Optimum spend per person, per year

If cycling is to increase to the levels seen elsewhere in Europe, then the resources allocated to the cycling sector need to be substantially increased. In major European cities with high levels of cycling, the average per capita investment in cycling infrastructure has been two to three times the level of investment seen in Britain, and maintained for longer - Netherlands and Denmark have been investing in cycling since the 1970s.

A good example of the results that can be achieved by significantly increasing the amount spent specifically on cycling is the *Cycling City and Towns* programme in England. Before the first 6 Cycling Demonstration Towns (CDTs, as they were first called) were established in October 2005, local authorities on average were investing around £1 per year head of population. A combination of funding from Cycling England and match funding from the authorities themselves, meant that the CDTs all **started investing at least £10 per person per year on cycling.** In November 2009, data from automatic cycle counters showed that the mean **increase in cycling levels across all six towns was 27% relative to a 2005 baseline** (prior to the investment).

Another project, the Sustainable Travel Towns (Darlington, Peterborough and Worcester, England, 2004-2009), saw an **investment of about £5.65 per person per year** in smarter choices (which include cycling). The number of cycle trips per head grew substantially in all three towns, by **26%- 30%**,

ii) Value for money

Evaluations commissioned by Cycling England showed that investment in cycling produces very high returns. A study of both urban and rural situations found that **£10,000 invested in cycling needs to generate just ONE extra cyclist over a 30-year period for the monetised benefits to equal the costs.** In other words, if £1million is invested in a cycling project, then it needs to generate only an additional 100 cyclists (3 short return journeys a week over a 30 year period) for the project to pay for itself; and if more are generated, then the project is in surplus. (This does not mean that the same people must continue to cycle, but that on average, there should be one more cyclist each year than would be the case were the investment not made).

Benefit to cost ratio (BCR): Government guidance on the evaluation of major projects says that a 'medium' value-for-money project will have a BCR of between 1.5 and 2, and a 'high' value-for money project a BCR of at least 2. An estimation of returns on the investment in the 6 first CDTs suggests a BCR of 2.6 – 3.5 (over 10 years, in terms of reduced mortality, decongestion, reduced absenteeism, amenity and road casualties). A case study of cycle training in London funded by TfL found that the overall BCR was 7.44, which is very high indeed London Cycling Network has calculated a benefit cost ratio (BCR) of 3.94 -far surpassing most major road or public transport projects. In other words,

cycling investment – if done properly – is one of the most cost-effective forms of transport investment available, as these examples illustrate.

Another valuable report is
The SQW report for Cycling England 'Planning the Benefits of Cycling' This sets out the argument for investment in cycling and the value of the benefits that it generates. The overall value accrues from the unique combination of the benefits that cycling offers through:

- improvement in general health and fitness
- reduced pollution and the emission of CO2
- help in tackling congestion

The annual economic benefits range from around £540 to £640 with the greatest economic benefits for cycling generated by urban off-road projects and the least by rural on-road ones.
The average benefit per additional cyclist is £590 per year.
While the differences between the scenarios are reasonably significant, it is important to note that the greatest impact that cycling has is on the health benefits of *additional cyclists*. These health benefits are universal. If people can be convinced to cycle, around two-thirds of the economic benefit generated does not depend on the location or type of facility. This is important from a planning perspective. The greatest difference that new facilities can make is *on their ability to generate additional cyclists*. In this respect one might argue that attractive off-road facilities are of particular value because they are more likely to attract new cyclists, by overcoming concerns about safety.
It is also important to bear in mind that the investment will frequently contribute to other objectives, such as increasing walking or may be part of a wider set of public realm improvements which are intended to improve amenity. Where this is the case only an appropriate proportion of the costs of the investment should be attributed to cycling.

Where does Birmingham fit in?
The Cycling Strategy promises a 'commitment of £1million for cycling facilities over the next four years.'
Budgeted capital schemes on cycling in 2012/13 amounts to £1,865k. (the city's contribution to the Bike North Birmingham scheme is £725k, Cole Valley £540k, and LSTF 'Smarter Choices'on Bristol Rd £400k).

John Bennett
PushBikes

Alternative transport: Cycling in the city; The city's canals Birmingham Friends of the Earth Scrutiny enquiry Contribution

Cycling

The use of cycles as a form of transport is of massive benefit to the environment, health, society and the economy. Of course Birmingham Friends of the Earth are hugely passionate about encouraging people in the city to get on their bikes. This is a view clearly supported by the facts.

1. How can we encourage cycling in the city that is efficient and safe, getting people from A to B desirably and sustainably linking urban areas?

The aim of the road network is to allow vehicles to get to the city centre as safely and efficiently as possible. The aim of the cycle network in this region must be the same. This is done for vehicles by having roads converge in the city centre with an inner city ring road, like spokes on a wheel, to allow travellers to get to their destination in the most efficient manner. Traffic planners will agree that this is obviously the most efficient way of setting up traffic flow in any city.

Clearly the road networks in Birmingham are not designed for both motorists and cyclists. A lack of proper cycle routes, and prioritisation of the car at junctions and crossings have left Birmingham placed 25th out of 26 UK cities for walking and cycling provision by the Campaign For Better Transports 'car dependency scorecard.

The cycle network, if it is to truly encourage cycling in the city must be organised in the same manner as the road network and focused most of all on encouraging commuters. In Europe as a whole, between about 30 and 40% of the person kilometres by bicycle is travelled on home-work trips. http://ec.europa.eu/transport At the moment the Birmingham cycle network appears to be set up for the purpose of leisure rather than commuting. This is probably a country wide issue as councils and the government in the recent past have focused on creating tourist friendly cycle routes by utilising canals and abandoned railway lines, and not treated cycling as a viable form of transport. Britain still lags behind countries with similar weather, population density and geography in terms of the percentage of trips for which a bicycle is used, even though there is a clear appetite for cycling.

- Holland – 27% of trips, 848 km per person per year
- Denmark – 19%, 936 km pp/year
- Germany – 10%, 291 km pp/year
- UK – 2%, 75 km pp/year

http://cyclinginfo.co.uk/blog/2636/cycling/stats-uk/

Cycling is experiencing an upsurge in popularity especially with Bradley Wiggins and all the other Olympic competitors becoming household names and national heroes, bike retail is also booming. Sales grew by more than 15% in 2010-11. Britons have being spending more on bikes, while spending on cars has fallen from £40bn to £35bn. The same is indicated by the membership of British Cycling, which has risen to 33,000, an increase of 16 per cent in the past 12 months: the highest level of membership since the organisation formed in 1959. 15% more vehicle miles were pedalled in 2010 than in 2007. The city councils own report ‘Cycle trends in Birmingham 2011’ shows a 73% increase since 2003. These increases in participation are exceptional and must be

reflected and encouraged further by an increase in provision for cyclists and pedestrians in Birmingham. The great thing about cycling is that it is not just sport, it is transport, and the increases should go hand in hand with one another. Investment is essential to encourage more cycling in the city and perhaps there should also be an initiative to put mechanisms in place to monitor and track cycle usage in Birmingham and find which interventions are successful, so as to better understand the investments needed and where.

2. How can natural green corridors and walkways alongside road networks be best used to create a city cycle and/or pedestrian network? How has this been developed in other cities? What are the barriers to this?

Cycling on the road in the UK has increased 12% up the last 10 years - using a 3 year rolling average – and just last year £40 million more journeys werentaken by bicycle. http://www.thetimes.co.uk/tto/public/cyclesafety/article3448897.ece The biggest increase has been on surfaces other than the road. The % Cycling 'mainly on the road' has fallen from 46% (2002) to 40% 2009 http://cyclinginfo.co.uk/blog/2636/cycling/stats-uk/ (taken from http://www.dft.gov.uk/statistics.) So whilst cycling has clearly become more popular in recent years, a lower proportion of cyclists are willing to use roads, the use of which would suggest more commuter based cycling.

It is reasonable to suggest that where cycle and pedestrian routes cannot co-exist with the current road network, perhaps because of traffic congestion, safety or lack of space, these routes can be diverted. But the diversions should be as minimal as possible, and only where green corridors leading into the city such as canals, roadside paths, disused railways, and riverside routes can be truly suitable for commuter based cycling. Many of these corridors however, are either entirely unsuitable for bikes, only suitable for mountain bikes, or too slow for commuter use.
Obstacles such as low and ageing canal bridges, locks, overly bumpy sections, overgrown bushes, mud – particularly in winter months, unlit stretches, wheelchair access gates, fords and flooded sections can be a real barrier for cyclists who want to get from A to B safely and efficiently, even though they may be no problem for leisurely weekend riders. The lack of proper segregation along roads is also a major problem

The recently produced 'Top tube map of traffic-free cycle routes in Birmingham' shows up the difficulties and obstacles commuting cyclists may encounter. http://www.toptubemap.com/ If you look carefully at this map, you will note than the majority of routes leading in towards the city centre are in fact canal towpaths. And in the key you will see that: 'Canal Towpaths – have a variety of surfaces − gravel, brick-paving, concrete slabs, grass and earth. They can be bumpy and muddy, especially in winter or wet weather, and are best suited to bikes with wider tyres. British Waterways ask that you obtain a free cycling permit before riding on towpaths.' I understand that these ridiculous permits have recently been done away with since British Waterways turned into the Canal and River Trust. However, this description still doesn't correspond particularly well with promoting easy, safe and efficient cycle routes leading in to the city centre. Also, walkers, joggers and wheelchair users can often feel intimidated sharing a narrow towpath with fast moving cycling commuters. Introducing a towpath code of conduct as endorsed by the Council and CRT in London may be a necessary step along sections of the canal used frequently by cyclists.
http://canalrivertrust.org.uk/see-and-do/cycling/share-the-space-drop-your-pace

3. What are the resource implications of adapting current cycle routes and joining them up?

+

4.Which partners can help us to do this and what resources do we need?

The report *Cycling Revolution* calculated that the health benefit of the cycle network was worth £442 million a year. It said that if all journeys made on the network last year had been made by car, an additional 760,363 tonnes of carbon dioxide would have been emitted at a cost of £40 million to the economy. http://www.thetimes.co.uk/tto/public/cyclesafety/article3448897.ece

"Cost-effectiveness of Bicycle Infrastructure and Promotion to Increase Physical Activity - The Example of Portland" by Thomas Gotschi, PhD
This was the first of its kind cost-benefit analysis for investments in bicycling by a US city It shows that relatively modest investments of $137 million in bicycling will produce health care cost savings of $470 million by the year 2040. Investments in bicycle infrastructure and promotion should therefore be widely considered as a highly cost-effective measure to increase physical activity among Americans and this was solely for health benefits.

It is plainly obvious that Birmingham can't simply hope for a cycling revolution without investment, however the overall economic benefits are there to see.http://www.guardian.co.uk/travel/bike-blog/2011/apr/07/london-blogger-calls-for-cycling-infrastructure-revolution Perhaps just following the lead of Copenhagen, Amsterdam and Sydney is the best to go about developing Birmingham's cycling infrastructure. There's no rule against copying someone else's idea, and it could be cost effective to do so.

The Rea valley route is a good example of a cycle route which runs fairly directly in towards the city centre and is diverted between sections of canals, riverside paths, through parks and along safe sections of road. It too has it's issues, as when you get through the Highgate area, there is little protection from city centre traffic, whilst a large number of road crossings slows down commuters.

As a city, Birmingham should be looking to create one route like the Rea valley route (only more efficient wherever possible) for every major road artery leading into the city. Some obstacles such as overgrown bushes can be easily remedied, others such as bumpy tow paths and poor access ramps would take more resources, whilst ageing low canal bridges cannot be included in commuter friendly cycle routes at all. The section of the Birmingham and Grand Union Canal that skirts around the city centre for example, is more of an assault course than a useful cycle route. There are steep inclines at each lock, low bridges and many lumps and bumps and sections where cyclists must dismount.

5. Who is currently cycling? Who could be most easily encouraged into cycling? What are the barriers and opportunities to uptake by more people and between more places?

In Birmingham, the percentage of pupils cycling to and from school was just 0.4% compared to 1% nationally. https://docs.google.com/file/d/0B3OX4ags5zyueFY3b2dSOHF6Tjg/edit?pli=1
This must surely reflect the lack of safe and efficient cycling infrastructure in Birmingham.
With safety being a major barrier to the uptake of cycling, the lack of proper segregation along roads in Birmingham is a major problem. These pictures of rubber separators taken in Barcelona should be a fairly cost effective way to achieve this:
http://www.flickr.com/photos/birminghamfoe/6014374540/in/set-72157625792038492
http://www.flickr.com/photos/birminghamfoe/6014375876/in/set-72157625792038492/
http://www.flickr.com/photos/birminghamfoe/6013831333/in/set-72157625792038492/
What works to make cities like Copenhagen and Amsterdam so safe for cyclists
http://www.guardian.co.uk/environment/bike-blog/2011/oct/27/bike-blog-going-dutch-lanes is the right infrastructure being in place, but also the rights laws and speed limits. Segregation is very well maintained on all major roads, with cyclists having priority at all junctions. Liability for any

accident lies firmly with the car driver (or cyclists if they hit a pedestrian) as there is an admission that more vulnerable road users need protection, not blame for being "in the way". On smaller streets, the speed limits are lower (about the 20mph mark, or even less) and street design is such that it is not possible to drive fast. Sydney is following suite http://www.guardian.co.uk/environment/bike-blog/2012/jun/28/sydney-noncyclists-bikes and it is obvious that these sorts of measures must be brought in if Birmingham seriously wants to be considered a safe cycling city. Figures from the House of Commons Library show that in 2010, 2660 cyclists were seriously injured on Britain's roads, the highest number this century.

Another important issue in terms of both provision and awareness is the theft of bikes and how to ensure people are not put off cycling, particularly commuters, because they don't feel there is anywhere to safely store it. According to British Home Office crime figures, bicycle thefts in the UK increased 12% between 2009 and 2010. http://ukcrimestats.com/blog/2012/01/30/bike-theft-a-highly-unreported-numerically-significant-crime And yet over 20% weren't reported, reflecting the public perception of how seriously the police take bicycle theft. What might be useful would be to work with the police to find where thefts occur and what the best means of prevention are, and get these messages across to the public effectively

Safe parking spaces for cycles certainly need more provision and perhaps more thought. putting bike racks in safe locations, reallocating car parking spaces (http://www.cyclehoop.com/products/category/car-shaped-bike-rack) and putting up notices next to bike racks showing cycle crime figures in that location and locking advice are all possible. Existing street furniture can also be adapted for cycle parking.
http://www.cyclehoop.com/products/category/cyclehoops
A link with central Birmingham's canals could be explored through the Cyclechain scheme.
http://www.cyclechain.org/current.html
Manchester have started installing 'Cycle Hubs' which are secure glass box parking facilities, but bike repairs and servicing can be done there whilst your bike is parked.
http://menmedia.co.uk/manchestereveningnews/news/s/1588570_wheels-in-motion-greater-manchester-cycle-hubs-start-to-take-shape
Communal pumps are also available. http://www.cyclehoop.com/products/public-bicycle-pump
The local development framework should be updated so that new developments in the city provide a much higher proportion of cycle parking for their staff. The London Cycling Campaign's Tom Bogdanowicz says "We've shown evidence that where there's decent provision for cyclists - such as the Guardian Media Group's 200 spaces for 800 staff and Freshfields solicitors 154 spaces for 1000 staff - it gets filled up quickly." And surely this should apply to Birmingham equally. Perhaps employers could even be encouraged to provide changing and showering facilities.

Canals

6. How can we fully exploit canals as transport networks? How has this been done elsewhere and how could we do it in Birmingham as part of a modern transport strategy?
+
8. What are the transport needs of people and businesses on canal routes and what could the network offer them?

Birmingham does have a great resource in its canals and these should be utilised as much as possible but it is important to remember what these transport networks were designed for originally, and understand that canals are not realistically going to be relied upon as transport networks in quite

the same way again. In the modern world, 18th canal networks must surely be multi-purpose if their economic, environmental, social and perhaps educational potential is to be realised. This means finding the right balance between leisure, tourism, transport and wildlife.

The use of canals for freight, especially heavy, non-time dependent goods (such as aggregates, waste products, building demolition waste, etc.) is an obvoius area to be explored both for environmental and economic reasons, as well as to help alleviate road congestion. Water is a very energy efficient means of moving heavy bulk goods because of the force of bouyancy. This means transport by calm water is many times more fuel efficient than transport by road and less CO2 dependent as this table shows:
https://www.waterways.org.uk/activities/freight/advantages_of_freight

Mode	**CO_2(g/tonne-km)**
Road	207-280
Rail	39-48
Inland Waterway	40-66
Air	1160-2150

Of course the Department for Transport is also offering grants to encourage the transport of freight by rail and water http://www.dft.gov.uk/topics/freight. The Freight Transport Association (FTA) says a scheme by the energy services company Dalkia that uses the Aire and Calder Navigation canal system in Yorkshire to carry timber for the power industry is being repeated in other parts of the country. According to the extinct British Waterways, which did oversee 2,200 miles of canals and inland waterways, 1.5 million tonnes of freight was carried last year and this figure is expected to rise. In their industrial heyday, canals carried nearly 40m tonnes a year.
http://www.guardian.co.uk/world/2012/jan/01/canals-biomass-transport-power

The study 'Developing Water Borne Freight on the West London Canal Network (WLCN),' from 2005 by Peter Brett Associates, found that the WLCN:

- could potentially take 640,000 tonnes per annum (tpa) of materials off the roads and save around 530,000 lorry-miles a year
- could potentially carry: municipal collected waste (300,000 tpa); recyclates (100,000 tpa); building materials (150,000 tpa); and construction and demolition waste (95,000 tpa)
- would help to reduce: lorry sensitive miles; carbon emissions; congestion; accidents involving HGVs

This study found a potential annual environmental benefit of up to £1m has been estimated based on Department for Transport road sensitive miles calculations. This report did also conclude that a journey requiring passage through more than two locks could become uneconomic, whereas lock-free journeys where both origin and destination are located by the canal offered savings of around 50 per cent. http://www.tfl.gov.uk/static/corporate/media/newscentre/archive/3838.html This is a potential barrier for some of Birmingham's canal sections such as the Grand Union central ring. However, a large section of the Worcestershire and Birmingham canal and the Grand Union between Alvechurch, through central Birmingham, out past Smethwick and into the Black Country is completely free of any locks. Many local businesses and industries could benefit economically from exploiting this transport route, whilst promoting their environmental and social credentials.

As mentioned in the cycling section, the recently produced 'Top tube map of traffic-free cycle routes

in Birmingham' shows up the difficulties and obstacles commuting cyclists may encounter. http://www.toptubemap.com/ Also, walkers, joggers and wheelchair users can often feel intimidated sharing a narrow towpath with fast moving cycling commuters and introducing a towpath code of conduct as endorsed by the Council and CRT in London may be a necessary step along sections of the canal used frequently by the public as a viable form of transportation. http://canalrivertrust.org.uk/see-and-do/cycling/share-the-space-drop-your-pace

7. How can we fully exploit canals as economic assets from enterprise and tourism perspectives as well as leisure perspectives?

Tourism on Britain's canals has become fairly popular in the recent past, but perhaps more effort should be made to encourage more floating businesses, such as cafés and shops. Examples currently include The Floating Coffee Company at Brindley Place and Cycle Chain floating cycle workshop. http://ourbirmingham.org/?p=2290 but there are opportunities for floating markets as a local shopping event and tourist attraction (like the recent one in Mile End, London). http://www.flickr.com/photos/canalrivertrust/sets/72157630758533622/ This could no doubt be replicated in the gas street basin area. The National Waterways Museum at Ellesmere Port is soon to be hosting a beer festival http://www.nwm.org.uk/ whilst there were plans, revealed in 2008, for a section of the Leeds-Liverpool canal to be transformed into a major heritage attraction. http://www.thetelegraphandargus.co.uk/news/local/airelocal/3991797.Plans_to_unlock_canal_tourism/ These kinds of plans and events have huge potential in Birmingham with it's ultimate selling point of 'more canals than Venice.' Perhaps there are opportunities to work with the Black Country Living Museum or Cadbury World for instance, to try to further exploit the heritage value of the West Midlands canals for tourism and educational reasons. Perhaps historical tours around Birmingham's central ring canal would be of interest to tourists. These projects and events should also be reflected via Birmingham city council's contacts and websites.

9. How is the canal network facilitated and limited by existing access between it and other transport networks. How can any limitations be overcome?

As discussed earlier, canal towpaths can only contribute so much to a safe and commuter friendly cycling network in Birmingham, but there are many sections that have the potential to be part of the network and yet have poor access, narrow, mud-filled paths or obstacles, and these are sections in need of improvement both for cyclists and canal users. As the Birmingham canal network has originally been situated around industry, roads and near railways, there are sure to be many businesses who can use canals as part of their logistical network, even just for a short section, but again, the access between canals and the road and rail networks could be updated.

10. How can communities and local businesses/organisations be more involved in looking after canals?

There are great partnership opportunities with the newly formed CRT (Canal & River Trust), which has replaced British Waterways, who as a charity are looking to work with communities, volunteers, local authorities, etc., which could maximise benefits and minimise costs. If local businesses used canal transportation which could save them money, they would certainly be willing to donate some time or money into protecting and looking after the canal networks.

Canals have a massive potential to be used as green corridors and can link green spaces together. The Canal and River Trust already have a number of schemes in the area for developing wildflower

and fruit tree corridors along Birmingham's canals, so there is clearly an opportunity to work together with them and local communities and schools.
http://canalrivertrust.org.uk/get-involved/appeals/create-butterfly-and-bumble-bee-highways-along-the-birmingham-mainline-canal
http://canalrivertrust.org.uk/get-involved/appeals/plant-wildflowers-along-the-canals-of-central-birmingham
http://canalrivertrust.org.uk/get-involved/appeals/create-a-community-art-project-in-the-heartlands-linear-park
Birmingham's canals provide an excellent chance for local schools to get their pupils interested and engaged in history, science and nature without having any major costs and also to encourage those children to, in later life, see canals as a major part of their lives, so ensuring the continuation of canal management.

The local canal network should also be explored for it's potential to provide small scale energy generated by micro-hydro installations at canal feeder reservoirs such as at Edgbaston & Lower Bittell as well as the potential for micro-hydro installations on canal lock by-washes (although probably dependent on the technology available for this). As well as doing a bit to tackle renewable energy needs, this would also increase the relevance of canals in the local community and possibly for businesses.

Canal towpaths can even be used for high speed optical fibre telecoms and broadband. This happens to a certain extent already, but could form part of Birmingham's 'Digital Districts' infrastructure, as canals run through Jewellery Quarter and Digbeth areas which are to be the first of these districts.

There is currently a shortage of moorings on the canal network, especially in urban areas, both for leisure moorings and residential moorings. An increase in leisure moorings could encourage more people to moor their boats in Birmingham, thus benefiting the leisure and tourism economy. Residential (live aboard boats) could even help towards city's housing targets. The DCLG has encouraged councils to increase houseboat moorings whilst the presence of people living on boats can also help contribute to 'natural surveillance' of canals to make them safer.
http://www.bbc.co.uk/news/uk-14690157

Cycling in the city; the city's canals
Scrutiny Committee Response

Transport, Connectivity & Sustainability
Overview and Scrutiny Committee
Birmingham City Council

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Introduction to Marketing Birmingham

Marketing Birmingham's vision for the city, in response to the challenges posed by the national economic climate, is clear and unequivocal; to position Birmingham as a world class destination for investment, a leading global event city, and an international city of choice that delivers a world class visitor experience. The Organisation's five year strategy aims to deliver sustainable economic growth for Birmingham by maximising the outcomes of the city's inward investment and visitor economy sectors within the constraints of the resources available. As the city's strategic marketing agency Marketing Birmingham delivers integrated marketing campaigns to strengthen Birmingham's image and profile as a city to visit, work and invest in. Furthermore it proactively attracts and retains companies in key sectors, increasing investors' propensity to invest, and improving the performance of the city's visitor economy to support the sustainable economic performance of Birmingham. A focus on inward investment and the visitor economy are two transformational areas that will deliver a sea change in the performance and competitiveness of Birmingham's economy. It is therefore essential activity is prioritised according to the areas of most potential impact:

- Attracting investment from the following high profile growth sectors and markets to Birmingham:
    - Shared Service Centres and Business Process Outsourcing
    - Financial Services
    - Transport Technologies
    - Emerging Opportunities: Digital Media, Low Carbon Research and Development, Clinical Trials.
- Contributing to the growth in GVA in Birmingham by creating and retaining jobs, skilled employees and spend in the city
- Strengthening the image and profile of Birmingham and its appeal as an investment and visitor destination
- Improving Birmingham's competitiveness in UK and international markets
- Increasing the value of the visitor economy
- Attracting major economic and high profile business events to Birmingham

Since its re-structure in early 2005 the organisation has been successful in building confidence, credibility and resource; significantly broadening its focus from the provision of leisure and business tourism services and destination marketing activities, to securing major events for the city and finally in 2010 extending its remit to attract inward investment and promote Birmingham as a leading business location. Whilst Marketing Birmingham has taken on a broader remit its funding has not increased exponentially; thus leaving fewer resources than in previous years for the marketing of the city's visitor economy. As of July 2011 Marketing Birmingham has started working with Solihull and the Black Country, on an ERDF funded project, to promote the city region's inward investment proposition and visitor economy. Attracting increasing numbers of investors and visitors are key elements of this programme and Marketing Birmingham is working with its partners to ensure music remains at the centre of this work; this will include supporting the promotion of independent festivals.

In response to the city's economic problems and resource restrictions Marketing Birmingham has developed a four year sales and marketing programme; resourced

from 2011/12 by a partnership agreement with Birmingham City Council, the development of new marketing partnerships, commercial sponsorship and European Regional Development Funding. The accompanying targets are ambitious and primarily focused on delivering economic growth for the city. The key indicators include the creation of over 11,000 jobs, the generation of £6.4m of commercial income, increasing the volume and value of business and leisure tourism, generating over £45m of Birmingham focused media coverage, and a return on investment of 10:1 for new investment secured.

In this capacity, we have evidence to support the following questions from your scrutiny panel:

- *How can we fully exploit canals as economic assets from enterprise and tourism perspectives as well as leisure perspectives?*
- *What are the transport needs of people and businesses on canal routes and what could the network offer them?*
- *How is the canal network facilitated and limited by existing access between it and other transport networks. How can any limitations be overcome?*

How can we fully exploit canals as economic assets from enterprise and tourism perspectives as well as leisure perspectives?

Evidence from our most recent visitor survey (Marketing Birmingham, 2010) shows that the canals are one of the top attractions for visitors.

Table 1

Top 10 most popular attractions of city centre visitors sample (791)		
	Will visit this trip	Satisfaction rating
Bullring Shopping Centre	59%	4.5
Brindleyplace/Canals	34%	4.7
Birmingham Museum & Art Gallery	31%	4.6
National Sea Life Centre	16%	4.5
ICC	14%	4.6
Ikon Gallery	11%	4.4
Museum of the Jewellery Quarter	4%	4.4
Cadbury World	3%	4.5
Botanical Gardens	3%	4.4
Thinktank	3%	4.3

Not only do they appear as the second most popular destination of leisure visitors (see table 1, previous page) surveyed at a number of locations throughout the city centre; they also have the highest satisfaction rating (4.7 out of a maximum of 5).

Table 2

Top 10 most popular attractions/venues of city centre business visitors: sample (*217*)		
	Will visit this trip	Satisfaction rating
Bullring Shopping Centre	30%	4.5
ICC	24%	4.6
Brindleyplace/Canals	22%	4.6
Birmingham Museum & Art Gallery	7%	4.7
Ikon Gallery	5%	4.2
NEC	3%	4.8
Balti Triangle	2%	4.4
National Sea Life Centre	2%	4.4
Thinktank	2%	4.3
Cadbury World	1%	4.8

In addition, table 2 shows that the canals prove very popular amongst business visitors, who tend to be higher spending visitors to the city. They also rate their satisfaction with the canals as very good.

Building on this success, it is clear that redevelopments that build on the canals' industrial heritage and architecture, offering a destination for visitors in the context of the waterways, can become attractions in their own right.

Birmingham would do well to encourage future developments to use the asset of the canal in their design and architecture, creating beautiful public spaces around these developments and ensuring that they are connected into the city using the canals as key transport corridors. These factors will all aid their exploitation as economic and tourism assets. We only need look to the success of The Mailbox hospitality offer, backing onto the canal, to see how thoroughly an area can change if the design is right and the canal feels safe to use.

From the visitor economy perspective, the canals need to be more visible in the information that is provided at decision points on the visitor's journey. This will be greatly enhanced by the Interconnect Birmingham on-street totems currently being installed. By autumn 2013 there will be a network of over 80 pedestrian totems and more than 100 onward journey information totems linked into the public transport network, creating an integrated wayfinding system.

The Interconnect Birmingham map base that has been developed is royalty-free and its copyright is owned outright by the Interconnect Birmingham Partners who have funded its development (Marketing Birmingham, Birmingham City Council, Centro, Colmore Business District & Retail Birmingham).

Finally, Birmingham city centre *core*, when viewed on a map, has relatively little green space. City Park will go some way to improving this, and Birmingham Cathedral and St Paul's Square are important resting and traversing places, where the pace of the journey can change. The natural world can be a welcome change for city residents and visitors seeking a break from the noise, speed and stimulation of the city. The canals could play an important role in bringing nature into and through the city for people, if they were a little more inviting in some sections.

What are the transport needs of people and businesses on canal routes and what could the network offer them?

Pedestrians and cyclists need four things in order to use the canal network:

1. Feeling safe & welcome
2. Knowing where they can get on the canal network
3. Understanding where the canal is heading and the context of the surrounding urban landscape (often out of sight from the canal)
4. Where to get off the canal.

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1. Both pedestrians and cyclists benefit from an increased level of (courteous) use of the canal network, as the public gaze is the most effective 'safety' mechanism we can employ on these routes. That is, the more people there are using the routes, the safer they feel and the more they are used. We can take, by way of example, the commuter route from Selly Oak at The University of Birmingham, through to Brindleyplace, which is popular with commuters, cyclists, runners and walkers.

   The physical state of access and egress points, the towpath itself and the cleanliness of the water and path from litter and graffiti are also important to the feeling of safety, or otherwise, for users. This would need to be addressed if we are to encourage more use of city centre canal network as a straight forward way to link up different areas of the city.

2/3/4 While Interconnect Birmingham seeks to signpost the canal network in the city centre, from the streetscape to the canals, the other most important information needed by cyclists and pedestrians, is knowing where the next, or best exit from the system is, and whether this is via ramp (for cyclist / wheelchair user / buggy) or steps – the latter will be a barrier to some. It is not enough to just signpost an exit, however, it must also show a geographical area beyond this – as it is only then that people can start to join up the urban realm and understand how the canal network weaves through the city and can connect different areas, rather than cutting them off.

We should seek to ensure where possible, that all journey information is integrated and that the user, whether they arrive by bus and then walk via the canal, or cycle in and then walk to shop, is presented with a common map base, icons and design, so that they can quickly link up their route and destination. In order to achieve this, we have to work in partnership to ensure that we continue to move away from the traditional method of information-giving, based on individual organisations (Centro providing information for bus passengers and Marketing Birmingham maps for visitors for example), and maintain the common resource that has been created for Interconnect Birmingham, where, regardless of where the user is on their journey, or what mode of transport they are using, the resource allows them to link this up in a common-sense way. We will be very interested in working with the Canal & River Trust to pursue this, meeting their aim to be open and accessible through providing information and raising awareness, so that the city centre network is legible and connected for all users.

How is the canal network facilitated and limited by existing access between it and other transport networks. How can any limitations be overcome?

Barriers to access has been of the major weaknesses in our ability to exploit the canals for tourism purposes. The development of Brindleyplace, and then The Mailbox has driven thousands of visitors to the canals. It remains the fact, however, that the canal network is not well linked into the pedestrian's mental map of the city centre: nor have arrival points in the city facilitated the journey to and from the canals.

One of the main ways that The Vision for A Walkable City – part of the Big City Plan – aims to generate a walkable city, is by ensuring that the walking and cycling network is connected. This focuses on connections to attractions, homes, places of work and leisure, in addition to working towards a higher level of connectivity between routes themselves (2010:17). Another key observation from this study is that the waterways actually inhibit movement of people by creating a barrier, rather than a route to follow (p34). Specifically commenting on the canal network, the study states that "Birmingham's wealth of canals is largely hidden and invisible to pedestrians... Towpaths through the Jewellery Quarter and Eastside remain hidden opportunities to extend and diversify the network." Although this was in the context of pedestrians, the same applies to cyclists who may use the towpaths if they were aware of them, following work to upgrade them and develop the public gaze. At present, there is the feeling that they offer an unsafe passage. Certainly we would not be recommending visitors use the canals for access on the city loop beyond Newhall Street if they have walked round from Brindleyplace. Revealing the canals could be an area of massive opportunity in opening up the walking and cycling network.

Commuter cyclists have a better knowledge of the network as it pertains to their commuter route, but probably have a relatively narrow understanding of the canal network as a whole. Work at the information level could ameliorate this, based on cyclist-specific mapping and information 'on the ground'.

Leisure cyclists, families and visitors would never be likely to access the canal network in the city centre by bike as it remains unknown, poorly signed from the street (currently), and feels too dangerous in some places – for example after Newhall Street heading north west. Developments facing the canal are to be recommended (The Mailbox, Brindleyplace's bandstand) rather than having their backs to the canal (Aston Science Park, The National SeaLife Centre) as the contrast between feeling welcome, compared to travelling through a no-go zone, is very clearly demarcated by the design, location, orientation and public spaces of developments. We also need to think about designing out corners and hidden entrances where the sight line to, from and along the canal is obscured. The different levels that we access the city centre canal network from also makes its navigation more tricky.

The development of the student accommodation in Eastside and the Higher and Further Education campuses in that area would provide a ready population for leisure and commuting use of the canals if they felt safer for cyclists and pedestrians / runners.

Canal & River Trust

Response to Birmingham City Council Scrutiny Inquiry

"Transport Needs : Canals in Birmingham"

October 2012

RESPONSES TO SPECIFIC QUESTIONS

1. ***How can we fully exploit canals as transport networks? How has this been done elsewhere and how could we do it in Birmingham as part of a modern transport strategy?***

   Waterways and towing paths play an important role in widening travel choices for cycling, walking, freight and public transport. The towing path network provides a motor-vehicle-free environment in which to travel to work, school or home, and 100 tonnes of carbon dioxide (CO2) are saved per 1 kilometre of towing path upgraded.

   Birmingham has an extensive canal network, some of which has undergone significant change in terms of it accessibility and welcome to the general public in recent years. Other parts of Birmingham Canal network are not fully exploited and do not meet current needs.

Canal & River Trust, previously British Waterways, have a long term productive relationship with Birmingham City Council. This relationship has resulted in very many transport based canal improvement works being undertaken in recent years to the benefit of local people and visitors to the City.

During the 1990's the City Centre canal network received significant investment which led to towpaths being improved and new accesses being created whereas some of the more outlying parts of the canal network still require these improvements.

Based on our experiences in the West Midlands and elsewhere in England an Wales, potential measures to better utilise the canal network as a transport route in Birmingham could include:-

- Undertaking a user survey to better understand current user needs
- Improvement of canal towpath condition, using good quality and durable materials, which will enable people to use them throughout most of the year.
- Undertaking a comprehensive survey and review of canal access and where required, investment in providing new and improved canal access points.
- Improving access and information provision for people with disabilities
- Better on site interpretation, waymarking and routefinding across the city, consideration should also be given to better web-based and portable device applications
- Education programme to encourage responsible cycling, and to ensure that any growth in towpath cycling does not create additional user conflicts or safety issues.
- Improved links to public transport
- Stronger links to major attractions
- Improved lighting where it is currently provided and consideration given to extending the areas lit at night
- Measures to enhance public safety through careful design, increasing footfall, better natural surveillance
- Better provision for visitors from outside of the area and also international visitors including multi-lingual signage, interpretation and wayfinding
- Better engagement with local communities, encouraging them to use the canal network as a sustainable transport route.

In 2012, a staff member from Canal & River Trust worked with representatives of Birmingham City Council and other organisations on a recent EU funded programme - Developing a Wider Skills Base for Cycling Coaches and Trainers, led by Birmingham City Council. As part of this programme, cycle training and development practitioners visited cities in Sweden to exchange innovative ideas and working practices. As part of that visit, time was spent looking at examples of city cycling infrastructure in Gothenburg and Stockholm, both of which have significant canal and river routes through their central areas. Some excellent examples of new and adapted infrastructure were identified, which could be for use in Birmingham:-

- High quality surfaced pathways adjacent to canals and other city watercourses including drainage which can be used at most times of the year for commuting and other travel.

Gothenburg City Centre

- Provisions to enable dismounted cyclists and pushchair users to ascend and descend steps, linking road network to canal network.
- Multi-lingual tourist signage

Gota Canal Orientation Panal

- A simple and coherent city wide method of route marking for both walkers and cyclists both on road and along the canal network

- City Centre Hire Bike Scheme, similar to that operating in London, which can be used on canalside routes

Cycle hire scheme Gothenburg

- In addition the representatives attended a presentation about a successful cycle to work initiative in Stockholm, supported by local major employers, some of which could potentially be replicated in Birmingham.

2. ***How can we fully exploit canals as economic assets from enterprise and tourism perspectives as well as leisure perspectives?***

Inland waterways are making a significant contribution to the visitor economy.
Inland waterways are:

- important tourism visitor destinations and attractions in their own right (attracting day-trippers, overnight stays, domestic and foreign visitors, and weekend and short breaks), as well as providing links to key markets, other visitor destinations and attractions (such as waterside parks, pubs, galleries and museums);
- the essential infrastructure upon which a wide range of leisure marine businesses are dependent;

As well as being a transport artery, waterways are a form of open space, performing a variety of functions. As part of the open space network (as recognised in PPG17), inland waterways and towing paths perform multiple functions, such as: strategic links between areas; important wildlife corridors; a recreation and sport resource; accessible amenity in urban areas; access to the countryside; visual amenity; and a community resource.

Proximity to Enterprise Zones:-

The canal network provides opportunities for sustainable travel to the proposed Enterprise Zones:

The Advanced Manufacturing Hub at the Aston Regional Investment Site is close to the Birmingham & Fazeley Canal and incorporates the Aston, Newtown and Lozells Area Action Plan Area which Canal & River Trust have made representations on.
The Tyseley Environmental Enterprise District is adjacent to the Grand Union Canal and incorporates the Tyseley LDO area which Canal & River Trust have made representations on.

The Life Sciences Campus at the Queen Elizabeth Hospital and University of Birmingham in Edgbaston are adjacent to the Worcester and Birmingham Canal.

City Centre Enterprise Zone (Adjacent to Birmingham & Fazeley Canal, Digbeth Branch Canal, Grand Union and incorporates the Aston and Digbeth LDO areas and Big City Plan area which Canal & River Trust have made representations on.

Longbridge ITEC Park (close to Cofton Reservoir and Upper Bittell Reservoir)

Proximity to key visitor attractions:-

The canal network in Birmingham, provides excellent opportunities for sustainable travel to visitor attractions. Notable examples include:-

The International Convention Centre and other venues in the Convention Quarter
Brindley Place shopping and restaurants
The National Indoor Area
Cadbury World
Sea Life Centre
ThinkTank
The new Birmingham Library
The Bull Ring

Canal & River Trust consider it important to ensure that, where appropriate, future developments have good linkage to the canal network as part of their design.

3. ***What are the transport needs of people and businesses on canal routes and what could the network offer them?***

The current users of Birmingham's canal towpath network include the following:-

Local People:-

Commuting to and from work, both on foot and by bicycle

Travelling to and from school, college and university. The canal network passes close to the City's main university buildings.

Travelling to and from shops and other facilities. For example the canal network passes close to both the City and the new Queen Elizabeth II hospitals, which are both major trip generators.

Using the canal for leisure purposes; angling, walking and cycling, running, dog walking

Accessing canalside businesses and retail premises. In the City Centre, many businesses fronting the canal are heavily dependant on their customers accessing the premises along the canal towpath. Bars and restuarants at the Mailbox and Brindley Place are example of this.

People from outside of the area:

Tourists arriving on foot, by bicycle or by boat

People visiting the "Convention Quarter, which is well served by the canal network.

Whilst the City centre area has high quality towpath surfacing which is fully fit for purpose and will remain so for many years to come, many of the towpaths on the outskirts of the city centre and other parts of the city are deteriorating with time and through heavy use by walkers and cyclists.

Notable, high use locations where the existing towpath is deteriorating include

- The Worcester Birmingham Canal between Kings Norton and the City Centre
- The Birmingham and Fazeley Canal between Minworth and the City Centre
- The Birmingham Main Line Canal between Winson Green and the City Centre

Through investment the canal network could offer the following:-

- Traffic free routes around parts of the city with little no direct cost to the individual – an important factor at a time when personal finances are under pressure
- Routes into and out of the city centre area which avoid the need to cross major highways or pass through busy road junctions. In many locations in the City where canal is present, it provides a good opportunity to avoid the busy road network. For example, the canal network passes underneath the Birmingham Ring Road dual carriageways in five locations, providing a great means of avoiding these busy routes. Consideration should also be given to better utilising the canal network to

provide viable alternative traffic free routes which avoid dangerous or otherwise problematic road junctions for walkers and cyclists. Funding is currently available for projects of this nature through the Department for Transport's Cycle Safety Fund.

- Commutable towpaths which are usable throughout most of the year, through investment in higher quality surfaces and better drainage.
- Sustainable routes to work of benefit to both employers and employees (including the potential to provide a pleasant environment for lunchtime walks)
- A more attractive environment, which could attract new employers or provide a better more appealing workplace for employees
- Links to other established, non canal sustainable travel routes, including the national cycle network.
- An improved environment where people can relax and "escape" from their normal surroundings, to a more natural environment which can benefit mental health.
- "Healthy Routes"; being mostly flat, the canal network in Birmingham can offer an ideal location for people wanting to improve their fitness levels through physical activity such as walking, cycling and running. For example, Sky,British Cycling and Birmingham Public health have recently been promoting "Breeze" rides along the cities' canals – an initiative aimed at increasing the number of women participating in cycling.
- "Health Hubs"; Canal & River Trust are currently considering running a pilot project to engage local residents and people from outside of Birmingham in taster sessions based on cycling, rowing, and canoeing at various sites in the City. There is the opportunity to work with Birmingham Public Health to develop this concept.

4. **How is the canal network facilitated and limited by existing access between it and other transport networks. How can any limitations be overcome?**

The 200-year-old network of inland canals, rivers and docks is a working heritage, and these waterways are all 'non-footloose' assets; i.e. the location and alignment of waterways are fixed.

Much of the canal network in Birmingham dates from the 19th Century. At the time of its construction, public access to the canal was actively prevented and in many locations there was no physical means of access to the towpath for many miles. Investment in the area, through a variety of sources, in recent years has addressed much of this legacy, however some parts of the network remain difficult to access, particularly for people with physical disabilities.

Another significant factor affecting accessibility is the topography of Birmingham's canal network. In many locations the canal is constructed in deep cutting or on steep embankments which make access improvements more challenging and expensive. In other locations, the rail network has been constructed immediately adjacent to the canal, which again makes creating new accesses to the canal more difficult to achieve.

There are some examples of good access between the rail network and the adjoining canal network, such as at Bourneville Station, however at several other stations, access provision is either poor or non-existent. These include; Five Ways Station, University Station, Selly Oak Station, and Snow Hill station. Consideration should be given to creating new or improved access at these locations.

There are several hundred accesses across the City linking the road network to the canal towpath in varying quality. In some locations there is very poor provision between the towpath and the road network. Notable locations include

- Worcester Birmingham Canal in the Edgbaston and City Centre area
- Birmingham Main Line Canal in the area around Winson Green, Dudley Road and Ladywood Middleway
- Lee Bank Middleway adjacent to Five Ways Station :-

- Consideration should be given to undertaking a comprehensive survey and mapping of existing provision, along current provision for people with disabilities. A prioritised list of improvements for any deficient locations should then be assembled.

5. ***How can communities and local businesses/organisations be more involved in looking after canals?***

Corporate Volunteering

Canal & River Trust actively seek to engage local businesses and employers in activities which benefit the canal network in Birmingham.

It inspires key decision makers to get involved with promoting and enhancing stretches of waterway, working with local community groups on the different ways they can help. This could include recording and improving wildlife habitats, taking part in practical work parties, promoting the waterway to other local people and running events and guided walks.

The ultimate aim is to increase local ownership, build relationships with the Canal & River Trust at a local level and give local communities a say in their local waterway.

A recent example is the work on the Birmingham & Fazeley Canal in central Birmingham undertaken by HFC bank.

A further example is on the Grand Union Canal around Tyseley where the environmental and waste company Veolia have begun to run regular volunteer events to improve the canal side area.

We have had one successful corporate day with Marks & Spencer in the Digbeth area; Aston University have undertaken towpath clean-ups; and Sea Life Centre hold regular environmental volunteer days.

Community Engagement & Volunteering

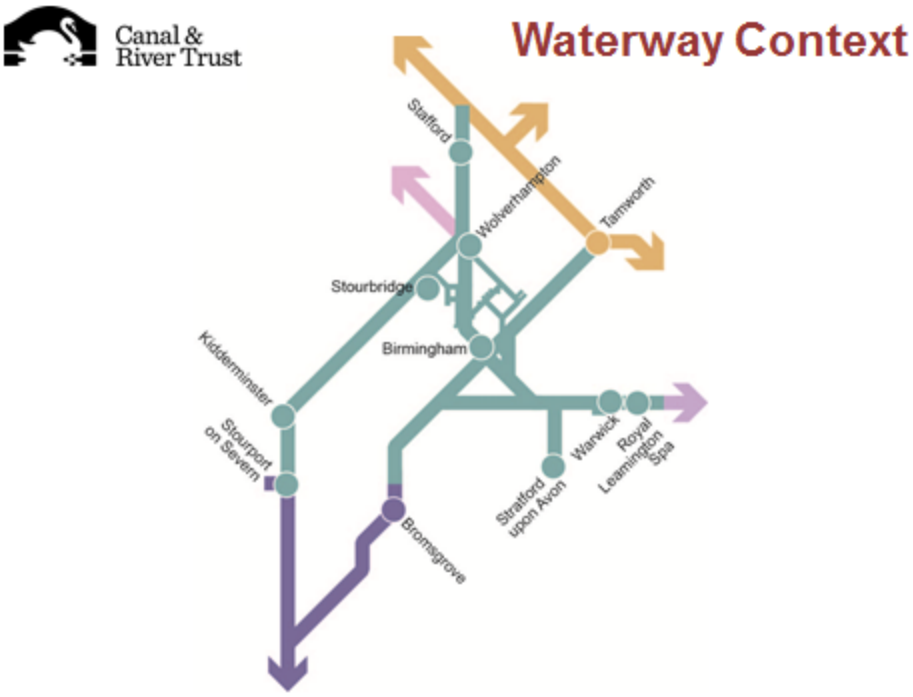
The Birmingham Heartlands Canal Ring project is an excellent example of how the canals can engage with and benefit local communities, and runs through the eastern side of the city. The project is supported with a grant from Natural England's Access to Nature scheme, which is funded by the Big Lottery Fund. The grant is being used to re-develop the canal into a linear park, connecting communities in the east of the city with the city centre. Covering the five most deprived wards in the city, the Partnership is made up of Ackers Adventure, Bournville Village Trust, Birmingham City Council, The Canal & River Trust, Enterprising Communities, Groundwork and Heart of Birmingham NHS Public Health. The Heartlands Canal Project provides opportunities for the communities of East Birmingham to engage with the canals in a positive way. The project aims to breakdown physical & social barriers between the communities and the canals by engaging with schools, community groups and local business.

The Birmingham Canal Navigations Society (BCNS) and Inland Waterways Association (IWA) regularly hold volunteer events around the city. In 2011 the IWA held it's weekend clean-up of the canals in the Saltley area of the city with over 100 people in attendance

Throughout the summer we have had a small dedicated group of local residents providing volunteer lock keeper services on the lock flights out of Birmingham. This has been universally appreciated by our boating visitors, especially considering the number of locks a boat has to pass through to get to and from the city. In addition every Wednesday a group of up to five volunteers join up to tidy up the city area, including access to and from local businesses.

OTHER COMMENTS

Birmingham's canals lie at the heart of Britain's canal network and form part of the West Midlands Waterway administrative area of Canal & River



Trust.

There is 69 km of canal towpath in Birmingham, making it one of the most extensive urban canal networks in Britain. Some canals in Birmingham have towpaths on either side of the canal.

National Cycle Network. Several canals in Birmingham have parts of the National Cycle Network running along them. The presence of National Cycle Network does not give any additional rights of use to cyclists. In the West Midlands, Canal & River Trust have a good working relationship with Sustrans who promote the National Cycle Network and work with us to improve infrastructure for cyclists and walkers. Through this relationship numerous

canal improvement projects have secured external funding from the Department for Transport and other initiatives.

Public Rights of Way. Most canal towpaths in Birmingham are not Public Rights of Way. Canal & River Trust are able to close such towpaths without notice to the public, for example to undertake maintenance or emergency works. Historically, public access to the canal network was actively prevented; Canal & River Trust is still dealing with that legacy in some parts of the City.

Need to account for all users.

Unmanaged growth of cycle use can lead to problems on the canal network. In parts of London for example, a sudden increase in cycling on the towpath has led to new challenges for Canal & River Trust. As part of measures to address these problems, Canal & River Trust has recently launched its "Share the Space, Drop the Pace" campaign in London, encouraging all towpath users to follow a new "Greenways Code" to help keep the canal network safe and pleasant for everyone to share.

Use of Canal Towpaths by Cyclists. It is to be noted that canal towpaths in Birmingham are not Cycleways.

Section 106 / Community Infrastructure Levy. Canal & River Trust supports and actively requests, where appropriate, planning obligations secured from development within or close to the canal corridor, through the existing Section 106 process. Historically, the canal network has benefitted greatly from this process which has enabled many waling and cycling improvement projects to be delivered. With the introduction of the Community Infrastructure Levy, this also provides opportunities for enhancements to canal infrastructure, should Birmingham City Council proceed with CIL charging with the inclusion of canal infrastructure within the schedule.

Cycle Usage Monitoring. Birmingham City Council have recently installed a suite of cycle counting devices into the towpaths around Birmingham in order to monitor cycle use. Early results show that some canal locations have around 500 cycle trips per day. Canal & River Trust have requested access to the data produced as it may help evidence the need for infrastructure funding.

Waymarking During the late 1980's and 1990's Birmingham City Council and British Waterways undertook an extensive programme of waymarking and distance marking many of the principal canal access points around the City. Much of the signage is now in need of refurbishment or replacement and the text for the destinations also needs review. Consideration should be given to improving this signage for the benefit of walkers and cyclists in Birmingham. In addition consideration should be given towards the development of mobile device applications to provide canal users with orientation and interpretation information about the City.

Typical plaque and wayfinding bollard system in use across Birmingham

Local Sustainable Transport Fund. Canal & River Trust welcome the inclusion of proposals to improve and better utilise the canal network in Birmingham for sustainable travel, as part of the Centro Local Sustainable Travel Fund programme. We await further dialogue with the City Council about the implementation of these schemes.

Canal & River Trust

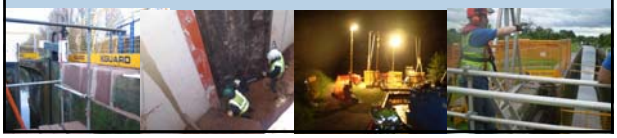
WEST MIDLANDS WATERWAY

Birmingham City Council Scrutiny Review Presentation

Canal & River Trust

TOPICS

- Background
- Birmingham canals
- Canal and River Trust – our aims and what we do
- Waterway Partnership for the West Midlands
- Challenges, solutions and possible ways forward



Canal & River Trust

WATERWAY USERS

93% Functional Users

290.7 million visits to CRT waterways in 2010, of which:

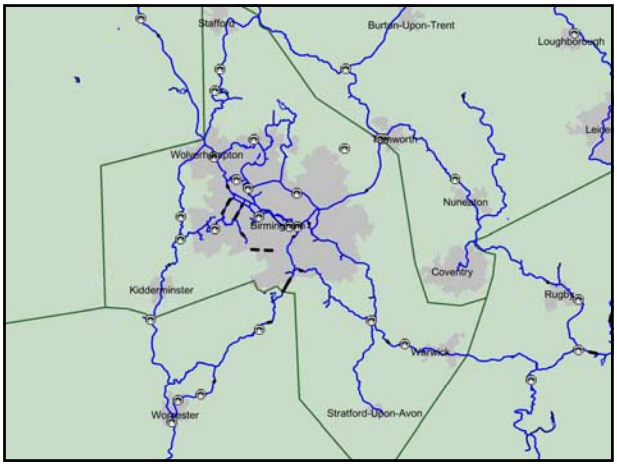
4% Passionate Enthusiasts

3% Activity Seekers

Canal & River Trust

PUBLIC BENEFIT

- Free public open space available 24/7
- Safe cycling and walking routes to school
- Safe cycling and walking commuting routes
- Access to nature and green space
- Environment and heritage classroom
- Living and working museum
- A place to relax



British Waterways

WEST MIDLANDS STATISTICS

WATERWAY

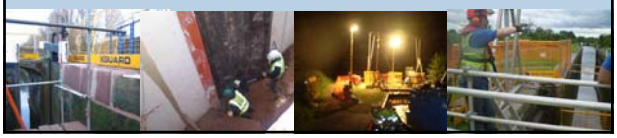
- 275 miles of canals
- 54 miles of canal feeders
- 287 Locks (about a fifth of the national number)
- 12 Reservoirs
- 454 Bridges (road, accommodation, moving)
- 260 Major Embankments & Cuttings
- 280 Weirs and Sluices
- 169 Culverts passing under the canal
- 12 Tunnels
- 56 Aqueducts

BIRMINGHAM CITY

- *38 miles of canals*
- *4 Principal feeders*
- *57 Locks*
- *1 Reservoir*
- *60 Bridges*
- *48 Embankments & Cuttings*
- *31 Weirs and Sluices*
- *16 Culverts*
- *4 Tunnels*
- *11 Aqueducts*

WHAT DOES THE WATERWAY DO?

- Day to day maintenance, repairs and risk management
  - Minor repairs costing less than £50,000 (e.g. lock gates)
  - Planned Preventative Maintenance (PPM)
  - Vegetation Management
  - Customer Service – lockkeepers, sanitary stations, signage, etc.
  - Inspections
- Planned and delivered locally through the direct labour workforce and contract
- Direct customer liaison and interaction
- Delivering volunteer activity and local benefit
- Annual budget of £6.8M



MAKING A DIFFERENCE

SO WHY TRANSFER TO A CHARITY?

- Securing a sustainable future for the canal and river network
- Make it valued by more people as a national asset
- Ensure they become a valued part of the local community through which they pass
- Give freedom to increase funding and give greater opportunity
- Long term funding agreement with Government

Canal & River Trust

Main Elements

- 15 year contract
- Core grant of £39m p.a. inflated (from year 3)
- Conditional annual grant of £10m for 7 years reducing to £4m by 2027
- Lump sum Pension Fund contribution
- Government 'last resort' guarantee for Pension Fund
- Repayment of £6m National Loan Fund debt
- Publishing of agreed data/information

Canal & River Trust

LAUNCH DAY 12th JULY 2012

Canal & River Trust

WATERWAY PARTNERSHIP

Waterway Partnerships – What Are They About?

The main roles of the Partnership:

1. **Bring more influence, knowledge and experience**
2. **Grow the resources available to the Trust**

"The Partnership is an advisory body, established to add value to the waterway. It will support and advise the waterway team on:

- *The prioritisation of available resources*
- *The development of the funding, volunteer and other resources*
- *The balancing of the interests of waterway users, the local community and others with an interest in the waterway*
- *The championing the interests of the waterway"*

PARTNERSHIP VISION

Making the West Midlands canals relevant to, and valued by, local communities, authorities, businesses & visitors

CHALLENGES FOR US

- **Resources** – planned preventative maintenance, legal compliance and priority defects repairs take up all assigned budgets. This means public expectations are not always resourced
- **Public Perception** – the general view of the city centre canals is good but beyond that we need to inform understanding of what's possible to deliver
- **Community engagement** – waterways not always valued. This can lead to litter, graffiti and anti-social behaviour. We need to work with communities to help them appreciate the canals more
- **Regeneration has slowed** – but waterside sites and locations remain valuable opportunities for us

Canal & River Trust

POSSIBLE WAYS FORWARD

- Volunteering
- Maximising mutually beneficial opportunities
- Partnership working e.g. towpath lighting
- Raising the profile of the canals and what's on offer

British Waterways

Canal & River Trust

Birmingham: examples of today's projects -

- **Icknield Port Loop:** partner with the city and Homes & Communties Agency
- **Selly Oak:** hospital site and other development links to the canal
- **University station:** improving access to the towpath
- **Cycling along the canal:** development of a safe culture of use of the towpath
- **Heartlands Ring project:** working with the local community
-

Canal & River Trust

We need your help in letting people know about these exciting changes – and making sure we continue to work together productively

Canal & River Trust

ANY QUESTIONS?

Cycle Chain

Sales, Spares, Repairs & Parking

Cycle Chain reponse to Scrutiny Inquiry - Alternative Transport - Cycling in the city; the city's canals

Our Mission:

Broadening opportunities for people with specific learning needs through using the bicycle as a learning tool and the promotion of cycling as a cheap and sustainable form of transport

Cycle Chain welcomes the commitment of the Transport, Connectivity and Sustainability Scrutiny Committee to improve the role that canals and cycling can play in meeting Birmingham's transport needs.

Cycle Chain is a social enterprise whose role is to deliver a service that has primarily learning and skills outcomes as well as transportation and environmental outcomes. We do not intend therefore to repeat the valuable points made in their submissions by Sustrans, Push Bikes and Birmingham Friends of the Earth about the cost benefits of improving cycling infrastructure, which we endorse. Our comments will be mostly limited to the particular contribution that our social enterprise business model can make to improving cycling in Birmingham.

The role of cycle hubs

Our new bike workshop on the *Carina* narrowboat at Cambrian Wharf, which was launched in September 2012, is our first contribution towards building a network of cycle hubs around the city. In addition to creating learning opportunities for people with learning disabilities, *Carina* will be a place where cyclists can leave their bikes securely while they are in the city centre, get a repair done, or buy a bike. We agree with the Birmingham Cycling Strategy that there is a need for many cycle hubs in Birmingham and we hope to be able to launch another one in future.

(Although *Carina* is based in a canal wharf and benefits from the use of canals by cyclists, we agree with the comments made in other submissions about the limitations of the canals for commuting purposes. To the north of Cambrian wharf is an area of canal towpath that is made of bumpy cobblestones, with frequent stops necessary due to low bridges etc; to the south is the Gas Street basin area where cyclists must

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proceed with caution and give consideration to the large number of tourists. Canals have their place but there is no substitute for enabling cyclists to use Birmingham's roads safely for commuting purposes, as is the case in many other European cities).

Building a sustainable mixed-income social enterprise model

The important thing about *Carina* is that it is multi-use. It is difficult to commercially sustain an independent bike retail facility, despite the growth in cycling in Birmingham. Since *Carina* is a learning centre, then it can attract income from that source since the economics of selling purely cycle-related services are still not favourable. We need to think of other ways in which cycling-related services can be joined up with other services to sustain a social enterprise business model. We are in discussions with a number of learning providers about how we can do this.

Community anchor organisations

The use of community anchor organisations to deliver Bike North Birmingham, such as the New Heights centre in Kingstanding, is a way forward for broadening opportunities to cycle. Community anchor organisations such as New Heights act as a resource for the community and increase the number and type of entry points to engage people in cycling compared to simply offering them cycling as a stand-alone activity. Cycling has for too long been seen as a minority activity for people who are quite committed to the activity on a lifestyle basis. We need to take cycling out of the ghetto and find lateral routes into mainstream life rather than simply exhort people to cycle for environmental or health reasons. We need to build more partnerships like this between cycling organisations and non-cycling organisations.

Increasing the supply of affordable bikes

One of the barriers to cycling is the availability of affordable bikes. Non-specialist high street retailers sell bike-shaped-objects for less than £100, which seem like attractive options to people on low incomes. However they are highly dangerous because they are not always assembled by a trained mechanic and in some cases have to be self-assembled by the purchaser. Also, they are of such poor quality manufacture that their useful life will be two years or less before they become uneconomical to repair. This makes it more difficult for people to sustain their cycling if they have use a bike

that is not fit for purpose because their finances won't stretch to the several hundred pounds necessary to buy a new bike of satisfactory quality.

Our model of bringing discarded bikes back into use and selling them at affordable prices brings safe cycling into the reach of people on low incomes. In some instances, such as through the Bike North Birmingham project, it is possible to provide such bikes at no cost to people on low incomes.

A good example of this success story is the bike sales that we have delivered at Aston University over the last few years, which has significantly increased the amount of cycle journeys made by students to the University. This has led to Aston University's copious provision of covered bike stands being used to their maximum.

We hope in the next few months to secure an additional supply of discarded bikes through the Re-use centre that Jericho Foundation will be running at Norris Way Household Recycling Centre, an operation that could be replicated at each HRC in the city. We believe that up to 2,000 bikes fall into disuse each year in Birmingham, most of these passing through the Police and the HRCs, and if all of these could be brought back into use and made available to new or returning cyclists, it would make a significant impact on cycling levels in Birmingham.

Giving 'nearly' cyclists extra reasons to get on a bike

Bike North Birmingham has succeeded in getting 'nearly' cyclists on to a bike for mainly leisure purposes. As others have pointed out, we also need to enable people to commute on a bike, and whereas the current cycling infrastructure in Birmingham creates good opportunities for leisure cycling, parts of it are hostile to commuter cyclists. Nevertheless, leisure cycling can be an important first step and so we plan over the next year to put on themed bike tours to explore Birmingham's heritage, wildlife and artistic potential. With one of the primary bidders to the LSTF, we also aim to provide training, buddying and mentoring to people who are beginning to cycle to work. Cycle maps are very useful but there is no substitute for experience in knowing where are the safe and convenient routes, and where are the places to avoid because they are unsafe, inconvenient or awkward. Even as we improve the cycling infrastructure of the city there will still be a need for led rides, training, mentoring and buddying of new cyclists.

Cycle Chain

Sales, Spares, Repairs & Parking

Conclusions

There are substantial economic, environmental and health benefits to Birmingham from increasing cycling. Re-designing the road network to create safe and convienient cycling routes is the key priority. Around this there need to be a number of enabling activities such as the provision of cycle hubs with safe parking and cycling services, as well as support for nearly and new cyclists such as training, mentoring and buddying. We would welcome any opportunity to work with Birmingham City Council and its partners in delivering these enabling activities. Our model means that we will always seek to deliver these in a way that meets our core mission of using the bike as a learning tool as well as a sustainable and affordable means of transport.

Contact:

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socialenterprise WEST MIDLANDS MEMBER

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24 September 2012

To The Transport, Connectivity & Sustainability Scrutiny Committee,

We write to you aware of your task in reflecting on how the existing canal network might better aid the development of cycling (as a sustainable means of transport) across the city. As one of Birmingham's largest cycling training providers Urban Cycles consider that we are well placed to offer some clear reflections. These reflections divide into three broad areas covering concerns about safety, accessibility and health.

In the last six months Urban Cycles have trained nearly 200 people (largely from Birmingham's most socially end economically deprived wards) to be safe confident cyclists. Our courses have equipped local people with the tools required for a life of utility and recreational cycling. As part of the induction process we ask participants to reflect on their previous reluctance to travel by bike. Our exit strategy then encourages participants to identify those practical steps required for a life of cycling as means of transport. A combination of induction and exit strategies clearly identify the following concerns. We have then added action points derived from our further consultation with Urban Cycles users.

Safety

There exists a very significant perception that cycling is not safe, that cyclists are unusually vulnerable and that their safety is not the concern for traffic or law enforcement officers.

i: An alteration of road layout within densely populated urban areas. Such alterations should be specifically designed to both prioritize and encourage increased cycling. Alterations could include the removal of parking bays on one side of the road subsequently replaced with designated dual direction cycling lanes. This would make a massive difference to the perception of cycling within urban communities.

ii: A review of all existing cycling lanes ensuring that cycle lanes protect cyclists, are sufficiently wide, do not end where they are most needed, do not conflict with parking facilities and do not exit onto dangerous roads without clear signage as to alternative routes for cyclists.

ii: Greater enforcement of those laws the breaking of which puts cyclists at risk, illegal parking, speeding, use of phones, especially in urban areas.

iv: Greater illumination on existing cycle paths especially canal paths.

v: An increased number of off cycle paths to and from places you might actually want to go, including access to the canal network.

vi: All canal access points to be safely accessible by cyclists and thus with a bike (no steep steps).

Accessibility

There is a significant perception that Cycling knowledge is difficult to obtain, abstract and elitist in its nature. Cycle routes are poorly signed and unlike car routes they use numbers and offer no other clear indication where they go. Current signage is inadequate and confusing. Cycle routes rarely connect with densely populated urban communities. Good route planning requires significant prior knowledge. Upon arriving at one's cycling destination knowledge of where to access safe locking facilities in places they are actually required is difficult to obtain and often impossible to access. The city council could assist by:

i: Improving signage to clearly indicate destinations in both directions.

ii: Improved number of easily accessible cycle locking facilities.

iii: Passing clear legislation which bans the redevelopment of any urban space unless it can identify how it encourages an increase in the use of sustainable transport. The subsequent redevelopment of any urban space, the building of new shops, educational establishments and restraunts must include significant cycle locking facilities.

iv: Funding cycle training other than school bike-ability which is currently only accessed by a minority of children within the most socially and economically deprived urban communities of Birmingham.

Health and Well being

While it is clear to all involved that regular cycling enables a dramatic improvement in health outcomes and thus a substantial saving to the city's annual health budget it is equally apparent that cycling requires or is perceived to require a base line of reasonable health without which the activity is inaccessible. In order to increase the number of persons participating in utility cycling it is therefore imperative that:

i: The city council funds access to cycling courses with a realistic amount of pump prime funding per participant. Funding should be based on results i.e.: numbers of persons demonstrating increased cycling participation.

Sincerely yours,

Andrew J Smith, Urban Cycles

Evidence to Scrutiny Inquiry: Alternative Transport: Cycling in the City; the City's Canals

By Val Woodward[1]

I am not a professional in this field, but bring the following experience, understanding and expertise, which I focus on in the evidence submitted below. I would be delighted to expand on, and discuss, this evidence with the scrutiny committee.

Volunteer Bike Rides Leader- *Breeze* rides plus 'community cycling' in Handsworth, Sparkbrook, Digbeth/Nechells, and Smethwick (ie a focus on those with low participation rates; esp. women and BAME communities).

Social bike rider and campaigner- member of *Push*bikes. I also cycle for leisure.

Commuter- cycling is my main mode of transport both to and from the various places I work in and around Birmingham, and to locations related to that work.

Community Activist- focusing on activities in Nechells and Digbeth- where I live.

Reflective learner- I constantly try to update my knowledge and understanding. For example, I participated in a trip to Sweden in June investigating cycling provision there, and how it might inform our policy and practice in Birmingham (DWSCCTB[2]).

Research, policy and practice- I am employed part-time by WEA (Workers Education Association) as Project Researcher for the action research project, 'Community Research for Better Health' (CRBH).

Experienced- I was involved with Spokes, a cycling group in Edinburgh in the late 70's and 1980s, having completed a dissertation about 'cycling as a mode in transport planning'.

[1] The photo is of me, and my much loved bike won in a Centro competition. Sadly that has now been stolen, as was the bike I owned previously.
[2] Developing a Wider Skills Base for Cycling Coaches and Trainers in Birmingham (DWSBCCTB)

My evidence

People resources

I believe that sensitively encouraging and facilitating cycling is far more crucial than physical infrastructure. In contrast to building and providing in the hope people will enthusiastically take up everything on offer, I focus on a people based 'bottom-up' approach. This recognises often invisible barriers to participation, such as thinking 'cycling is not for us'; 'you need to be young/fit to ride a bicycle'; 'I will look stupid on a bike'. This therefore depends on skilled and passionate leaders.

Handsworth Health and Well-Being Group (HHWBG)

This morning I led a group of adults around Handsworth Park, as I have been doing recently nearly every Thursday morning.

The bikes used are available for the community to use, and this new group compliments the more 'advanced' rides organised by a member of staff at the Leisure Centre. Participants in these very informal, friendly, community led rides have joined in only after -

1. Work was done empowering *Handsworth Health and Well Being Group* to organise the rides
2. Contacting a Be Active coach to teach beginners
3. Participants trusting leaders and having a group to join in with
4. Feeling welcomed to the group by the 2 leaders and by other members
5. The rides are local and easily accessible
6. The park is a wonderful park, and staff at the Leisure Centre are very helpful
7. Seeing others riding around the park
8. Receiving help, teaching, support and guidance from myself and a Be Active coach
9. Participants understanding they do not need specialist cycling clothes
10. Finding Velcro strips (very cheap) can fasten loose clothing
11. Having bicycles available (Handsworth Leisure Centre has a bicycle hub)
12. There are toilet facilities at the Leisure Centre
13. Knowing the rides will be done at the speed of the participants
14. Knowing the rides will be in a safe environment
15. A focus on fun, rather than skills
16. Acceptance of the reality of invisible barriers such as lack of confidence in physicality

Bike Rides in other areas

The success of this group leads on from other groups whom I have encouraged to cycle.

The groups exploit safe routes such as along canals where we can also learn about our environment.

And emphasise the importance of a welcoming, inclusive approach based on fun and chocolate cake!

In summary

Nurturing is more important than provision. This involves skilled, passionate leaders who in turn need recognition and support for their work- whether paid or voluntary. The greatest challenge for leaders is reaching out to those who perceive barriers to cycling in their lives. This is an important part of a healthy, active civil society[3]. Providing bikes and rides does not, in itself, do this. As can be seen above, other *Breeze* leaders (in red jackets) have enthusiastically joined in rides, with participants from so-called difficult to reach communities, which they had not felt able to organise themselves. My experience shows that all groups, including those with currently very low participation rates, can be fairly easily encouraged to join in, if the right approach is adopted. However, for cycling to become a widespread acceptable leisure activity and mode of transport, it needs to be part of the everyday lives of potential participants; not an elite activity. Therefore partnerships should be forged with community groups and community sector organisations that already adopt a 'bottom-up' approach (such as HHWBG and the CRBH project at WEA).

[3] As witnessed on the DWSBCCTB trip to Sweden

Having attitudes and values that identify with healthy living does not necessarily mean these beliefs are carried into everyday life[4].

However, complimenting a people focused strategy there is a need for a visible improvement in infrastructure, displaying a policy commitment and creating a visible, accessible system for cyclists and potential cyclists to use[5].

1. Easy, cheap bike hire, learning from examples in Sweden, France and London
2. Good signposting of routes
3. Further develop the production and dissemination of paper and on-line maps
4. Publicise safe routes
5. Create many more safe routes
6. Consider building high profile routes, such as developing the disused viaduct in Digbeth; referring to similar projects in France and the USA
7. Create good surfaces on cycle routes- plenty of examples elsewhere, such as in Sweden
8. Provide lighting and safe spaces on cycle routes
9. Remove blockages to cycle movement caused by steps and barriers
10. Create bike parking and hire facilities at public transport hubs
11. Create ways for bikes to be taken on all public transport
12. Improve bike storage in residential areas; especially multi-storey blocks; Edinburgh has done some pioneering work on this.

Sweden (Gothenburg 2012)

[4] Shove, E. (2010) Policies and Theories of Social Change Environment and Planning 42 1273-85

[5] Cycling for transport and public health: a systematic review of the effect of the environment on cycling SDS Fraser and K Lock European Journal of Public Health

Resources

As has happened elsewhere[6] there should immediately be a target of 10% of journeys to be made by bike and an allocation of 10% of the transport budget. Once the volume of cyclists increases on roads, cycle routes and in parks, and cycling becomes visible and 'normal', even more people will be encouraged to cycle, as witnessed elsewhere (eg London, Edinburgh and Sweden). Logically then, targets and percentage budget allocations should also increase.

Canals

My particular interest in canals comes from living in Digbeth where the canals provide the potential for educational, and leisure activities. The local residents association (DRA) are already providing some walks and tours, plus working in partnership with local business and cultural groups to develop further positive use of local resources and contribute to regeneration through encouraging greater local vibrancy.

Such positive action, encouraging increased use of the canals, will make cycling normal and visible and greatly contribute to looking after canals.

I also already use the canal system to regularly travel between Digbeth and other parts of Nechells plus Smethwick and Handsworth. The muddy surfaces and frequent broken glass often cause problems. I avoid canal routes once it is dark. Far greater investment and maintenance needs to be carried out for these routes to be truly attractive for a broad spectrum of people.

[6] Times 11th Feb 2012

Response from Cllr Bedser, Cabinet Member for Health & Wellbeing

Cllr Bedser was pleased to be able to contribute to this timely and well focussed investigation of a key strategic issue for the wealth, health, and wellbeing of the city.

His main comments are as follows:

- Cyclists on the canal: there is an issue for the city about the perceived hierarchy of use on Birmingham's canals. Cyclists, walkers and runners often jostle for position, with reports of potentially aggressive behaviour from cyclists, along with concerns about safety from all groups of leisure and commuter users of the canal network. Cllr Bedser would wholeheartedly support the development of a multi department/ agency steering group to look at issues around effective signage on the canal infrastructure that delivered the following outcomes:

- encourages shared use of the canal network
- promotes safety of all users
- and provides clear information about location and routes

- the prominence of the motor vehicle in the city: the city can feel like it is designed for cars and not people. Cllr Bedser is concerned about the length of time that many of the pedestrian crossings take to allow pedestrians across. While he acknowledges that traffic does need to be kept flowing, there is a perception that the balance is too far in favour of the car. Cllr Bedser would support any initiatives that looked to re-balance the priority that was given to the motor vehicle, along the lines of the towns/ The Albert Hall area where traffic signals have been taken out and vehicles and pedestrians are encouraged to negotiate the space in a more shared way.

- vision for public transport in the city: Cllr Bedser would support the view that we still haven't got this quite right and that public transport is still divided socially and by income. The reality of the transport network is that there is a perception that buses are ' for poor people' and that they are not a safe form of transport. The city has yet to make a reality of light train/tram options to maximum effect, and connectivity and the promotion of movement could be much clearer and more strategic.

Cllr Bedser would like to explore initiatives like a Birmingham Oyster Card, or free bus/train travel for the under 16s in the city, in order to see a step change in public transport use. He suggests that there is scope to explore expectations of car use and holding a licence within employment terms and conditions, and that BCC has a role as an employer to do more to promote more sustainable forms of transport on a very practical basis (providing changes facilities, secure bike storage, dress codes for cyclists/walkers etc.)

Cllr Bedser is fully supportive of the aspirations of the committee and greatly appreciates the opportunity to feed into the evidence collection. He would like to support is the extension of Bike North Birmingham to a city wide project. He would be happy to support relevant initiatives in his role as Cabinet Member for Health and Wellbeing in response to the findings of this committee.

Overview of leisure cycling initiatives in Birmingham

Karen Creavin
Head of Sport and Physical Activity
Birmingham City Council

Local context

- 1.1 million people in the city- largest local authority in Europe and youngest city demographics
- Life Expectancy at birth

2007-2009	Males	Females
England	78.3	82.3
West Midlands	77.5	81.9
Birmingham	76.4	81.4

- Unemployment in April 2011 was 11.7%.
- **20% adult participation (NI8) in sport and active rec in Birmingham (Active People Survey April 2010-April 2012)**
- Immense deprivation- 408,000 people in 10% most deprived households nationally

National context

- Physical inactivity- 4th leading risk factor for global mortality, accounting for 6% deaths (WHO, 2010)
- Costs NHS an estimated £1.06 billion (DofH, Let's get moving)
- Physical Activity interventions cost £20-£440 per QALY, significantly below £30,000 threshold (DofH, Let's get moving)
- Limited evidence on costs benefits specifically attributed to cycling and health.
- Research from Finland provides strong evidence that journeys to and from work by cycling provide sufficient intensity to improve health and fitness (Oja et all)

Cycling – the evidence base

- UK study shows that compared to someone sedentary, person cycling 4 days per week would have significant impact on reducing obesity
- Cycling can address absenteeism- UK leads the number of sick days taken each year in Europe- costing £170 billion
- Evidence indicates that regular physical activity reduces the risk of all cause mortality, coronary heart disease, stroke, type 2 diabetes, osteoporosis, some cancers and depression, as well as bringing many positive benefits for psychological health and well being
- Health benefits of cycling are greatest amongst those populations that already cycle, either for leisure, sport or commuter purposes

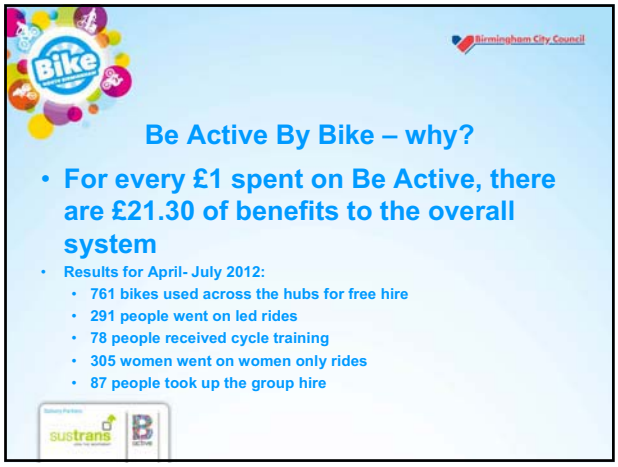
Cycling – the picture in Birmingham

- Active people survey 2012 shows increase
- West Midlands one of lowest levels of regular cycling (3.7%)
- Participation in BME groups declining
- 2% of commuter trips in WM are by bike
- Disability cycling on the increase- Bid gone in to SE Inclusive sport fund for disability cycling programme

Current initiatives in Birmingham for leisure cycling

- Be active by Bike- free bike hubs
- Bike North Birmingham
- Sky Ride
- Sky Ride Local
- BMX club


Bike
Birmingham City Council
Be Active by Bike
• Funded by Public Health as part of free Be Active offer (£70,000)
• commissioned to British Cycling to manage/ deliver
• The project has set up 6 community cycling hubs in priority wards: Sparkbrook, Nechells, Lozells and East Handsworth, Washwood Heath, Erdington.
• Each hub has a minimum of 4 mapped rides, access to free hire bikes, organised led rides by trained ride leaders,1-2-1 training, adult cycle proficiency training and bike maintenance courses, Ride leader training and volunteer opportunities
sustrans


Bike
Birmingham City Council
Be Active By Bike – why?
• For every £1 spent on Be Active, there are £21.30 of benefits to the overall system
• Results for April- July 2012:
• 761 bikes used across the hubs for free hire
• 291 people went on led rides
• 78 people received cycle training
• 305 women went on women only rides
• 87 people took up the group hire
sustrans


Bike
Birmingham City Council
(LSTF) Bike North Birmingham
• £6.4 million project (of which £4.123 is from the Local Sustainable Transport Fund) targeting the 'maybe' cyclists through a package of cycling infrastructure and smarter choices in North Birmingham
• The infrastructure package includes 9 new cycle routes and crossings which integrate with the existing cycling network.
• The project also works with employers and schools to encourage cycling to work/school. Grants are given for cycle storage and loan bikes and cycle training/bikeability is carried out with primary and secondary schools. Free bike maintenance also takes place at both work places and schools.
• The community offer targets those not currently cycling and looks to remove barriers to regular cycling: access to bikes, confidence levels, cycling ability, cycle maintenance knowledge
• Website: www.bikenorthbirmingham.org.uk
sustrans

Bike North Birmingham- community element

- **Free bike hire-** individuals, families, friends
- **Free long term loan**
- **Free cycle training-** from complete beginners to improvers
- **Free led rides**
- **Free cycling groups**
- **Free cycle maintenance classes**
- **Grants for social enterprise**
- **Route planning**

Successful case study

One lady rang us for Learn to ride sessions and we offered her 1 - 1 sessions at times that fitted in with her and her life. This lady has M.S and has not been near a bike since she was a child. After 2 months and 7 sessions, she has just returned from a cycling holiday, and whilst away cycled over 45 miles! She is now joining in with our leisure rides programme.

Sky Ride

- The event is organised in partnership by British Cycling and Birmingham City Council – Sport and Events Team
- Part of a small national series of events
- Sky Ride Birmingham started in 2010
- 2012 event attracted 20,000 cyclists to Birmingham
- Smaller led rides called **Sky Ride Local** events take place throughout the summer

Birmingham BMX Club

- Based in Perry park, completed May 2011. One of the biggest clubs in Europe
- 560 members- range from 2 years old to Olympic level Athletes
- Track facility regards by world BMX teams as one of the best for racing and training (rated in top 10% internationally- ASA BMX)
- Open sessions run by BCC and BMX club – weekly attract 150 riders
- Track was first to do inductions
- Other use includes: youth groups, Parties, BMX coaching sessions, private track hire
- Ethnicity of users: 65% white, 15% Black,10% Asian, 10% other (all categories amalgamated)

Opportunities and Aspirations

- Joint canal hub with British Cycling, Rowing, and Canoeing- aiming to extend be active offer to led rides/paddles along the canal. Targeting families not currently active
- Troubled families work- £ from Sport England to work in targeted way with 'troubled families to increase physical activity levels
- Increase in cycling contributes to sense of 'critical mass'
- Health benefits clear for individuals and could also contribute to community and city benefits- social cohesion; air quality, travel poverty etc.
- Make Birmingham a city that has few barriers to cycling:
  - Routes
  - Cost
  - Access
  - Skills

ROAD SAFETY EDUCATION REPORT

2011 / 2012

A report of the work delivered by the

Road Safety Education Team (RSET)

TABLE OF CONTENTS

1. BACKGROUND

1.1. The Road Traffic Act 1988 (Section 39) places a duty on local highway authorities to prepare and carry out a programme of measures designed to promote road safety. This includes studying the occurrence of collisions, taking preventative measures and reducing the possibility of casualties on new roads (i.e. collision investigation, prevention and safety audit).

1.2. Birmingham City Council's Road Safety Education Team (RSET) supports the Act through the delivery of road safety education, training and publicity (ETP), regional/local campaigns and working with other organisations such as WM Police, WM Fire and voluntary bodies in the delivery of road safety education.

1.3. The activities delivered by the RSET are set against National Indicator 47: 'People killed or seriously injured (KSI) in Road Traffic Collisions' and National Indicator 48: 'Children killed or seriously injured (KSI) in Road Traffic Collisions'.

1.4. The RSET also works towards the vision for Birmingham and its strategic outcomes within two elements of the Council's objectives: to create a vibrant low carbon, low waste economy and the Council priorities Stay Safe in a clean, green city (protecting vulnerable people).

2. RESOURCING OF ROAD SAFETY EDUCATION

2.1. The RSET consist of 1 Projects Leader, 7 Road Safety Officers (one post job share) and 1 Technical Officer funded from the Transportation and Street Services Revenue Budget. The Team also received for 2011-12 a grant funding of £60k from the Department of Transport (DfT) to deliver the Bikeability scheme.

2.2. The average value of preventing a fatal collision is £1.9m with the value of preventing a collision involving injury averaging £75k. (source: PACTS). On average BCC spends 35p per head of population on its Education, Training and Publicity (ETP) function for road safety.

2.3. From April 2012 the Development Directorate was redesigned and renamed Sustainability, Transportation, Employment and Partnerships (STEP) Division. Within this new Division is the Smarter Choices Team which merged Road Safety Education, Travelwise and School Travel Plans. This new Team will drive the future safe and sustainable promotion activities of Birmingham along with the delivery of road safety education in line with BCC's Council's corporate priorities.

3. DATA ANALYSIS

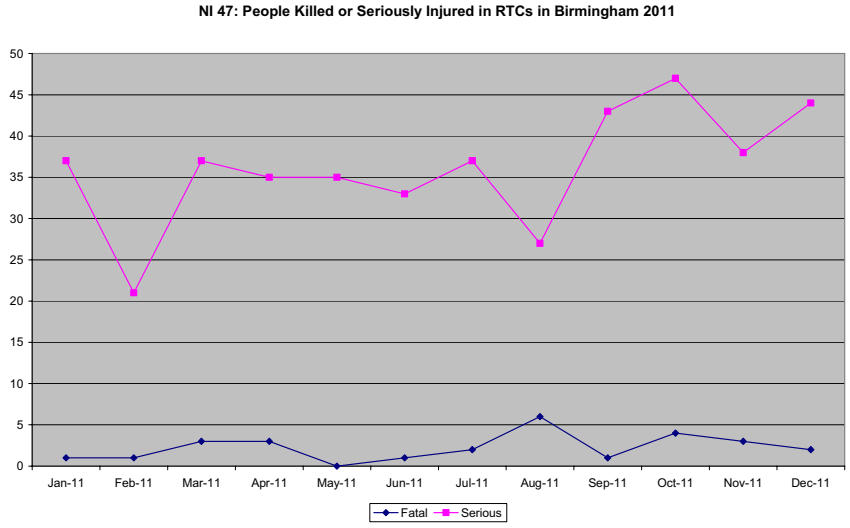
3.1. The Police collect statistical information on reported personal injury accidents in the form of STATS 19 records which is used to inform road safety initiatives and policy. This data is extremely useful to the RSET, but it does have some limitations.

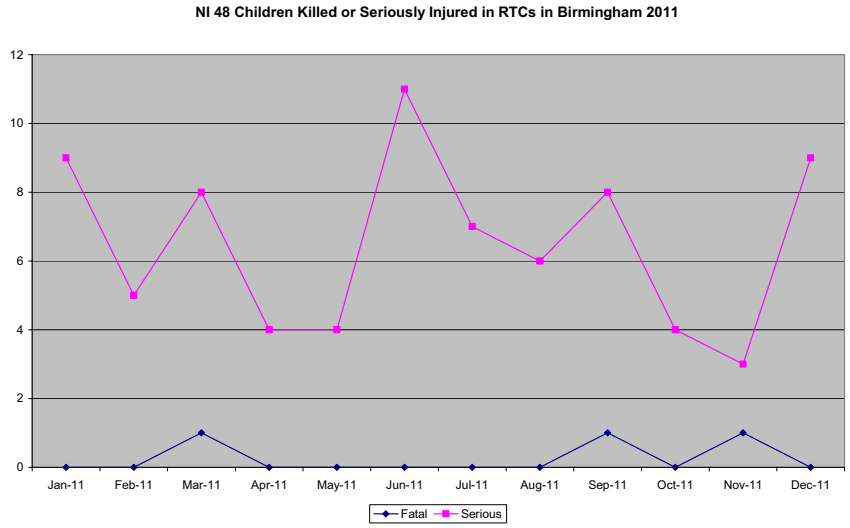
3.2. There are three key groups which together constitute more than half of the deaths in Great Britain:

a) Young car drivers and passengers aged 17 – 24;
b) Motorcyclists; and
c) Pedestrians in urban areas.

3.3. The most common contributory factor relates to pedestrians where they have failed to look properly, where pedestrians have used crossing facilities wrongly or crossing the road while masked by a parked/stationary car.

3.4. In 2011 for Birmingham the number of Killed or Seriously Injured (KSIs) for NI 47 was 27 fatalities and 434 serious; for NI 48 there were 3 fatalities and 78 serious as illustrated in the Tables below:





4. DATA LED ANALYSIS

4.1. In 2010 the Government announced a number of funding reductions across the public sector which ultimately led to the abolition of the Road Safety Grant along with significant cuts to road safety spending. For road safety teams across West Midlands this meant an urgent need to prioritise spending amid diminished resources and increased localism.

4.2. The RSET have access to an online data analysis tool MAST (Market Analysis Segmentation Tool) that gives a more in-depth analysis into the people involved in crashes. MAST uses Experian's citizen classification data for the UK called Mosaic Public Sector and cross-tabulates it with reported injury statistics i.e. 'STATS19' after the form that is used by the Police for the recording of road traffic collisions.

4.3. Greenspace Ltd a road safety consultancy was issued a brief by the West Midlands Road Safety Partnership (WMRSP) via West Midlands ITA, Centro in September 2011 to use MAST for numerical and socio-demographic analyses of casualties across the Metropolitan area and by constituent Local Authority. The information collated would draw on Mosaic Public Sector to produce location based descriptions of the lifestyles, favoured

communications media and other useful information that road safety professionals could use in road safety projects/initiatives.

4.4. The data that was generated by Greenspace Ltd showed that in Birmingham the groups most affected by RTCs were from some of the most disadvantaged people in the West Midlands. These groups includes a high concentration of recent migrants, families with school aged children in urgent need of housing and high numbers of young parents with pre-school children who are a priority for social housing.

4.5. The data also showed that Birmingham and Solihull to be atypical compared to the rest of the West Midlands and England norms, but for different reasons. For older people the data shows Birmingham's overall casualty age profile to be largely in line with West Midlands and England norms.

4.6. The analysis produced has been used to assist the project management of road safety projects and initiatives.

5. ANALYSIS OF WORK DELIVERED BY THE RSET

5.1. Birmingham's RSET are committed to making Birmingham's road users as informed as possible. An example of this is the team's contribution towards maximising the health potential of children and young people by encouraging pupils to take more exercise through its cycle and walking to school programme. There are another number of other targeted activities aimed at raising awareness to other road users and these include safety campaigns, young driver initiatives, older road users and working with communities.

5.2. Children are amongst the most vulnerable road users and education is an essential part of getting the road safety message across. A large part of the RSET work is delivered in schools through the Personal, Social and Health Education (PSHE) curriculum. A range of other activities in addition to school work is undertaken and these include web page maintenance, motorcycling, periodic campaigns (drink drive, speed and seatbelts etc) and the development of resources for regional and national campaigns.

6. PEDESTRIAN TRAINING

6.1. The RSET pedestrian training workshops have been developed to continue the good practice of the "Kerbcraft" Scheme developed by The Department for Transport (DfT) which recognised safe versus dangerous crossing places; crossing safely at parked cars; and crossing safely near junctions. All the pedestrian workshops delivered encourage road safety and more importantly practical training which are delivered in the road environment. All the workshops fit within the national curriculum.

6.2. Primary Education

Key Stage 1 Training
Role Play Equipment (Nursery/Pre-School Children)
A fun and versatile resource that can support the teaching of road safety within the curriculum.

Clever Crossing (Year 1/2)
A 45 minute in-class session where children learn about the Green Cross Code and why it is important to stay away from traffic. There is the option of a roadside session.

Learning By Doing (Year 1/2 Community Approach)
A 4 week workshop that involves parent volunteers in delivering the training to children. Children learn about the Green Cross Code and why it is important to stay away from traffic.

Think About It (Year 3)
The workshop is split into two sessions where children are taught to explore rules and how senses are used in road safety. The practical sessions involves children carrying out two short traffic surveys comparing quiet and busy roads.

Who's Taking a Risk? (Year 4)
A workshop for children to develop an understanding of risks and the consequences of taking risks along with guidance in planning a safe journey.

Keep Thinking (Year 5)
A workshop whereby children develop an understanding of traffic calming measures and risk assessment.

New Journey (Year 6)
A workshop to give pupils the confidence to plan and prepare for change which focuses on the journey to and from secondary school. Children are encouraged to plan their new journey with safety as a priority.

6.3. **Nursery Education -** Pre-school children are offered a talk lasting between 45 minutes to one hour. Children are taught to keep away from traffic and always hold hands with a grown up. To complement the talk role play equipment is used comprising of a miniature pelican and zebra crossing along with dressing up uniforms.

6.4. **Secondary Education -** A new road safety workshop 'heads you win, tails you don't' has been developed for year 7 pupils. The workshop encourages young people to investigate the nature of risk taking behaviour and to think about the consequences of their actions. During the workshop students are shown a provoking DVD called 'Time Out' and are encouraged to participate in a debate on a variety of road safety issues.

6.5. **Young Driver Education -** I Drive a driver education workshop delivered by our partner 5 Star Driving Academy continues to be a success. The workshop is aimed at 16/17 year olds to improve road safety awareness in the local community by making young people safer and more responsible. The young people attending the workshop also have the opportunity of driving a car supervised by a qualified ADI in a controlled environment.

6.6. **Sustainable Education –** A new pedestrian workshop has been developed to raise awareness to primary pupils of the benefit of walking and cycling to school.

6.7. **Working with Communities -** The Steward Scheme which involves volunteers escorting children to and from their places of worship has proved a success. Good praise for the scheme has been received with many parents supportive who feel a need to play a part in the scheme for it to be successful.

7. HEALTHIER AND MORE SUSTAINABLE TRAVEL

7.1. The RSET works towards getting 'more people cycling more often' through its range of cycling initiatives. The initiatives make effective use of Birmingham's canal towpaths and green spaces, getting people healthier and to help ease traffic congestion and reduce carbon emissions.

7.2. **Bikeability Training -** For 2011 the RSET received £60k to deliver Level 2 Bikeability to 1500 students. The RSET successfully trained 1500 pupils as well as over 500 from its own in house sources. Of the 2000 children trained 9% were from deprived areas. To ensure that the training is offered to all children across the city there is a pool of loan bikes and helmets that is available to schools upon request.

7.3. **Adult Training -** During 2011 adults across Birmingham have been encouraged to learn to cycle through partnership working. To promote travel modes to women the RSET has

worked in partnership with British Cycling in delivering a 6 week women cycling course and one to one cycle training. British cycling has set up hubs across the city whereby communities can loan bikes for either training or for leisure. This has been beneficial to the RSET cycling programme as it has overcome one of the barriers to cycling i.e. access to bikes.

7.4. The RSET has worked with Centro on its Pershore Road Project in delivering cycling initiatives by providing instructors for their adult training programme which was delivered to City Hospital staff.

7.5. **Instructor Training Courses -** Cycle Training West Midlands (CTWM) is an informal partnership between local authorities, in the West Midlands. It is run by local government road safety professionals specifically to provide cycle instructor training for local authorities and other government organisations across the UK. The RSET has delivered 3 Instructor Training courses on behalf of CTWM to further increase its pool of instructors. Many of these new instructors are young people wishing to get involved in Bikeability and local Social Enterprises who are looking to engage with their communities.

7.6. The popular Bikeability Plus which has been developed by the RSET continues to be a success with schools and communities. Bikeability Plus includes bike maintenance and bike rides that offer trainees basic bike repair; and bike rides for a more communal approach to cycling.

8. AWARENESS CAMPAIGNS AND PARTNERSHIPS

8.1. Local partnerships are already taking a leading role in delivering road safety education and the most successful initiatives delivered are those that are welcomed by the community. Many of these partnerships have shown that they have particular qualities that compliment the work of the RSET.

8.2. National and local road safety issues are the subject of regular publicity campaigns. Themes such as drink drug driving and seatbelts reminds people of the dangers of careless behaviour. The RSET working alongside statutory partners on local campaigns reinforces the message on issues such as summer child pedestrian casualties or the need for motorcycle training.

8.3. **Birmingham Road Safety Partnership (BRSP)** – This is a Partnership that brings together BCC, WM Police, WM Fire, ROSPA and the PCT and is based on goodwill and shared common purpose. The Project Leader represents the team on this Partnership.

8.4. **West Midlands Road Safety Partnership (WMRSP)** - The Partnership was established in 2007 to promote safety for all road users in the West Midlands Metropolitan Area and support the attainment of West Midlands targets for the reduction in the number and severity of casualties from road traffic collisions. The Project Leader represents the team on this Partnership.

8.5. The RSET has worked with partners and stakeholders to promote a new motorcycle CRASH card. The card which was developed by the RSET has the mnemonic CRASH on one side and on the other side there is room for personal contact and medical details. The idea behind the CRASH card is for emergency medical services to identify a rider by the visor sticker which will enable the emergency service to instantly access medical information if the rider is unconscious.

8.6. The RSET and the Charity BRAKE organised an annual Road Safety Week in November. 2011. Working in partnership with the Territorial Army Unit, WM Fire Service and 5 Star Driving Academy the launch held at Sutton College highlighted the horrific consequences of road crashes to the young people. Casualty statistics revealed by BRAKE show that every week a young person is killed on roads in the West Midlands.

8.7. **Seatbelt Clinics** - There are still communities in Birmingham where non-compliance of child car seats is still a major problem. The RSET have been offering families in Birmingham the opportunity to have their child car seat checked at one of its free seatbelt clinics. To complement these clinics educational workshops have been delivered at children/community centres.

8.8. For 2011/12 the RSET tested 242 car seats of which 26% was fitted correctly, 54% was incorrect, 8% had no seat fitted and 12% had no seatbelt worn. Taking into account incorrectly fitted car sets, seatbelts not being worn and appropriate car seat not being used a total of 74% failed.

8.9. **Older Road Users** - Older residents in Birmingham are one of the most vulnerable road users. The RSET has been working Age Concern and older people centres in delivering road safety workshops. A road safety bingo game to support the workshop is delivered which serves as a reminder to remember to be safe on the roads. Campaigns have been held at supermarkets at specific times of the day.

8.10. The RSET during 2011 reached a wide audience to deliver vital road safety messages. The team has been involved in: Ladywood Fire Station Safety Day in July 2011; Handsworth Fire Station Open Day in August 2011 and Tyre Safety Check at One Stop Shopping Centre in November 2011.

8.11. During November 2011 and January 2012 the RSET working with Trading Standards, WM Police and Tyresafe (one of the UK's leading tyre safety organisation) urged motorists to stay safe and legal when driving during the winter months. Campaigns were delivered across the city at various supermarkets with winter packs being given out thanks to WMRSP.

9. SHARING GOOD PRACTICE

9.1. In September 2011 a delegation of road safety professionals from The Shibaura Institute of Japan visited the RSET as one of their stops on a tour of Western Europe. The delegation was visiting road safety professionals across Europe in order to gain an understanding of how Western Europe promotes road safety to older users. The delegation were shown samples of the work that the RSET delivers and especially the older road user campaign of which they felt the information would be beneficial to their research and development of their own road safety programme.

9.2. **The Developing a Wider Skill base for Cycling Coaches and Trainers in Birmingham (DWSCCTB)** - Each year National Agencies throughout Europe organise 'Contact Seminars' whereby organisations from one EU country can meet, formulate project ideas and share common interests. The Leonardo da Vinci Mobility Programme is a project backed by EU funding. The application submitted by Birmingham and its partners was successful. The Developing a Wider Skill base for Cycling Coaches and Trainers in Birmingham (DWSCCTB) is co-financed with the costs up to a total maximum amount of EUR 25560.

9.3. DWSCCTB is about vocational education and training. Participants from different cycling backgrounds will be visiting Sweden in June which will enable sports/cycling coaching and training professionals from Birmingham to learn from the Swedish experience of cycling in a community and economic context. The project will seek to improve knowledge and skills in cycling practice and build up skills of participants to enhance their competences in vocational and educational training. Organisations involved (UK) – Birmingham City Council, British Cycling, Sustrans, British Waterways, Birmingham Public Health and SISU Idrottsubildarna, Skoevde – an educational organisation for the Swedish Sport Federation.

10. ROAD SAFETY EDUCATION BEYOND 2012

10.1. Staying safe in a clean, green city is one of Birmingham City Council's key priorities and road safety education is integral to this priority and as such forms one of the strategy topic areas within West Midlands Metropolitan Areas Local Transport Plan (LTP3. LTP3 is expected to be more delivery focused than pervious Plans.

10.2. The new Smarter Choices Team will lead the implementation of Bike Birmingham Cycling Strategy with the aim to increase cycling to reduce congestion and improve activity. Schools across the city will be encouraged to review and update their Travel Plans to prepare them for the impact of climate change.

10.3. In the 'Birmingham Low Carbon Transport Strategy 2011+' the city has set a target to reduce CO2 emissions per capita by 60% from the 1990 level by 2026. In 2008 road transport accounted for approximately 24% of carbon emissions across the West Midlands with private cars accounting for two thirds of this.

10.4. Offering 'Smarter Choices' – a package of techniques for influencing people's behaviour towards more sustainable modes of transport is a key component of the Smarter Choices Team. Packages will include interventions which are easy to deliver such as safer cycle training for both children and adults, walking initiatives and road safety education. Cycling which is a key component of 'Smarter Choices' does not cause pollution and therefore can play an important part in improving air quality and reducing carbon emissions.

11. The new Strategic Framework for Road Safety (SFRS) contains UK-wide casualty forecasts for road deaths and KSIs up to 2030. However the Framework was Call for Evidence issued by the House of Commons Transport Select Committee on 13 September 2011 for the inquiry into the SFRS.

12. The SFRS has set no road safety targets for road safety professionals to work towards. 'Tomorrow's Roads – Safer for Everyone' was seen as challenging as it gave priority and focus, to all in the field of road safety. The Government's view is that Local Authorities should address road safety at a local level.

13. CONCLUSION

13.1. Good Partnership working have been forged with agencies to ensure that the public receive consistent and coherent messages not only on road safety education, but on how these interlink with other areas such as antisocial behaviour and health. It is people who live in an area and hence experience the problem of road safety that are more beneficial to the success of any project.

13.2. Children most at risk are those from families on lower incomes who often live in large council estates. (Source: MAST). There is also a link between deprivation and road safety risk with the most deprived areas still remaining slightly over-represented in the casualty population. Making pedestrians and cyclists feel safer is crucial to promoting walking and cycling and is a key area for the Smarter Choices Team.

13.3. In Birmingham the Smarter Choices Team will continue to work in partnership with other agencies and third party sector to carry out local Safety schemes at various locations around the city, education campaigns and Enforcement at speed and safety camera sites.

14. The safety of people on the Metropolitan Area transport network is a priority of the LTP3 and road safety education still continues to play a major part in reducing collisions and Birmingham will aim to reduce KSIs casualties by 17.3% between the baseline 2005-2009 [476] average and the 2011-2015 [394] average meaning that by 2015 casualties should be no more than 394 with the aim of keeping it at a level.

centro
transforming public transport

Briefing Note

To: Birmingham City Council – Transport, Connectivity and Sustainability Scrutiny Committee Members

Date: December 2012

From: Conrad Jones, Head of Sustainability

Subject: Cycling and Centro

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1. Purpose

To provide Members with an update and additional evidence regarding Centro's approach to Cycling.

2. Introduction

For the West Midlands to continue to prosper, we need an efficient, fully integrated, low carbon transport system. This will help to deliver economic growth, support people's health and the environment, and connect more people to jobs, education, housing and leisure opportunities.

Centro's Vision is for *'a world class public transport system delivered by a best in class organisation.'* Our vision is set out in the Integrated Public Transport Prospectus. The Prospectus aims to inform many decisions by many stakeholders over the coming years to achieve the world class transport system.

The prospectus supports the West Midlands Local Transport Plan (LTP) which was co-ordinated to align with and support the national and regional agendas for the economy and environment to ensure the health and wellbeing of the people of the West Midlands is met through an efficient and reliable transport network, which includes sustainable modes such as cycling. The LTP also established medium to long term priorities for transport in the West Midlands within 10 Long Term Themes (LTT).

2.1 LTP and Cycling

The Long Term Themes are a thread which run through all of Centro's activities and highlight the inter-relationship and contributions we all make to help achieve the 14 targets set out within the LTP. LTT3 *Modal transfer and the creation of sustainable*

travel patterns and LTT8 *Effective and reliable transport integration* focus on improving and promoting cycling as key mode of choice.

Integrating cycling with public transport for example provides a viable alternative to the private car for many medium and long distance journeys. Public transport operators are increasingly recognising the potential of encouraging cycling to and from their stations.

Centro is therefore working closely with the seven Metropolitan councils (Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall and Wolverhampton), transport operators and walking and cycling organisations to make **walking and cycling commonplace** in the West Midlands by improving connections to bus, rail and Metro stops and stations.

We also recognise that more needs to be done to enable more people to cycle and walk across the region, and will work with Councils and other stakeholders in 2013 to develop a joint Active Travel Strategy and Action Plan.

2.2 Walking, cycling and public transport – the smarter travel choices

Walking or cycling is often the most convenient, easy, healthy and sustainable way to reach public transport, and for short journeys under 5 miles. Making these smarter travel choices help people:

- Combat climate change by reducing CO2 emissions
- Improve health and fitness
- Save money, by reducing household travel budgets
- Reduce local traffic congestion and help economic growth
- Reduce pollution and improve air quality
- Access employment, skills, education and leisure opportunities
- Get out and about more and enjoy all the West Midlands has to offer.

3. Centro's current approach to Cycling

Through listening to our customer's views and ideas, and undertaking research, we are implementing a number of initiatives to **make it easier for people to walk or cycle to connect to public transport**.

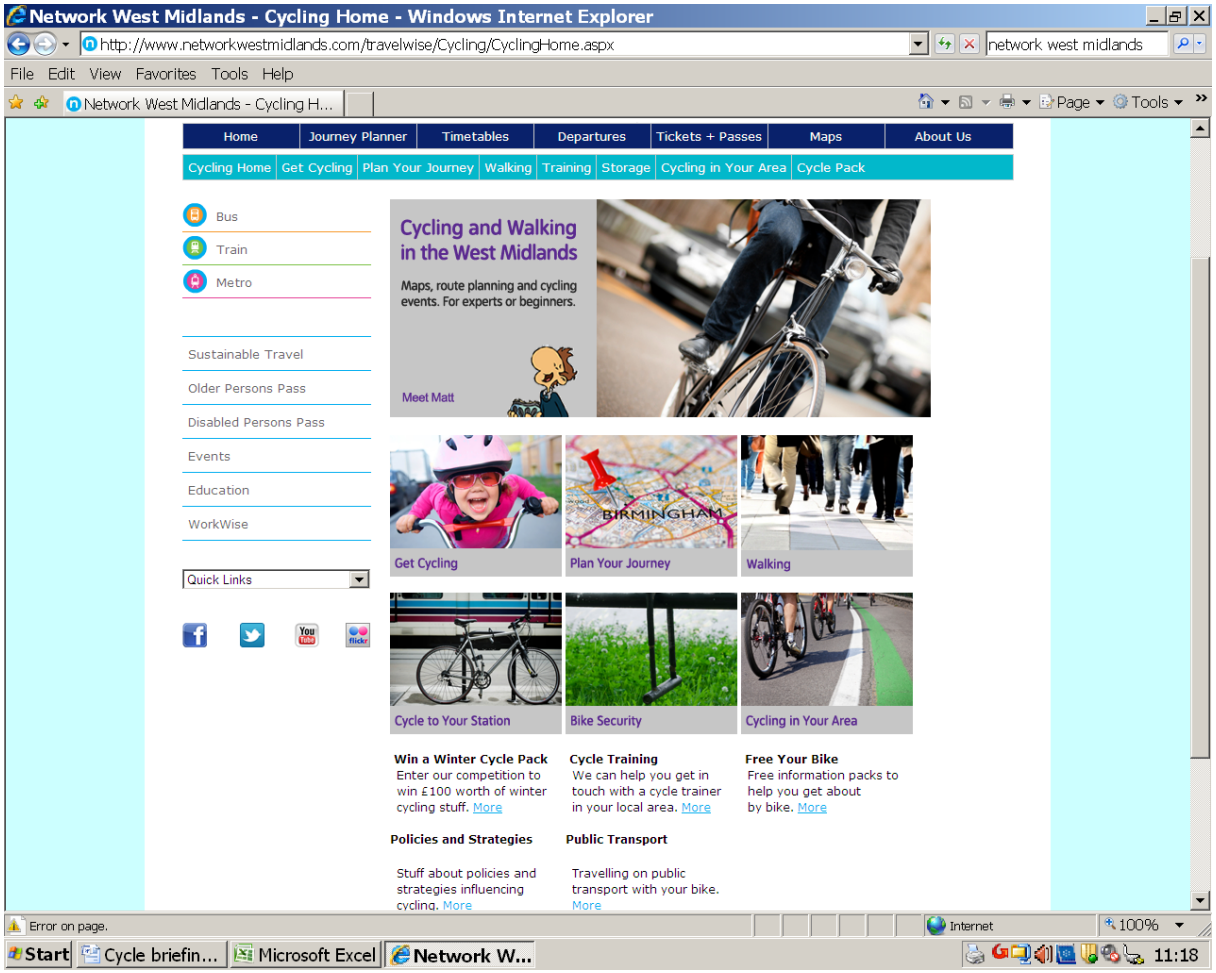
3.1 Improving cycling information

Network West Midlands (NWM) is the name that connects all public transport in the West Midlands metropolitan area.

Where ever you see the symbol, you will find information about travelling on the public transport network. As all journeys by public transport start and end with a walk, cycle or drive, we wanted to improve information about all types of travel – so therefore we introduced new NWM logos for walking, cycling and car sharing.

Where ever you see these logos, you will find information about walking, cycling and car sharing – ensuring the transport network includes all environmentally friendly forms of travel.

Centro and our partners produce a range of resources to support cycling and walking, including a one stop online portal on the NWM website http://www.networkwestmidlands.com/travelwise/Cycling/CyclingHome.aspx



This portal includes links to a variety of cycling resources including cycle training, bike security, journey planning, cycling in your local area and cycling to local stations.

As part of the LSTF *Smart Network, Smarter Choices* programme, we will be developing this online portal to provide tailored cycling support for local schools, employers and residents across the region.

More and more people are using the web to plan their journeys, and Centro offers a comprehensive journey planner at www.networkwestmidlands.com for travelling by bus, train or Metro. This journey planner has recently been updated to offer journey planning options for people who want to cycle for all or part of their journey.

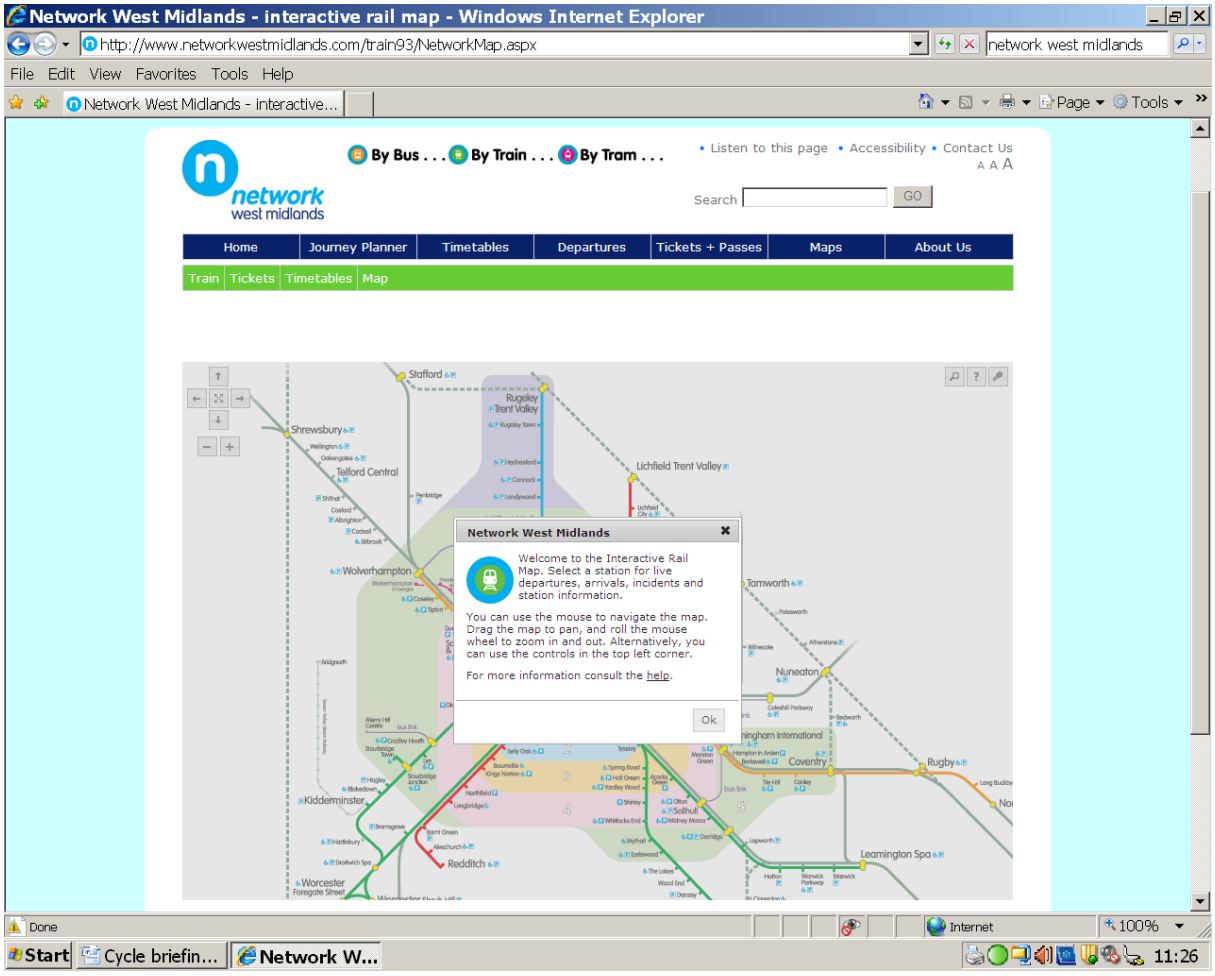
For those without internet access, we also offer a range of Cycling maps and resources produced by Councils, cycling organisations and the Canal & River Trust. These are available free of charge at our Network West Midlands Travel Information Centres.

3.2 Cycle parking

We already provide over 1,000 cycle parking spaces at train stations, Metro stops and bus stations across the Network West Midlands area allowing people to park their bikes before continuing on with their journeys. In the past five years, we have invested over a quarter of a million pounds in improving cycle parking across the network. This year, in conjunction with rail companies, we will introduce more cycle parking facilities, so people can safely park their bikes before continuing with their journeys.

We ensure that all new cycle parking we install is well signposted, so people are aware of its location at public transport facilities. We also ensure that it is situated in a location accessible to cyclists, sheltered against the weather, and in an area of good natural surveillance and covered by CCTV to reduce the risk of cycle theft.

To help existing and potential cyclists, we produce a Cycle and Ride leaflet which is available at local stations, Travel Information Centres and online (please see http://www.networkwestmidlands.com/travelwise/Cycling/Location.aspx). This is further supported by the Network West Midlands interactive rail map, which details cycle parking at individual stations



Centro monitors customer feedback and usage of cycle parking at each rail station, Metro stop and bus station to determine future investment and identify where more

cycle parking is needed across the region. This is then built into our cycle parking investment programme.

We are also developing two pilot **Cycle Hubs** at Selly Oak and Stourbridge Junction rail stations, which will provide secure, Smartcard accessed cycle storage, covered by CCTV. These hubs will be installed in Spring 2013 and will provide a step change in the quality of cycle parking at rail stations in the West Midlands.

3.3 Reducing cycle crime

Centro understands that fear of crime can sometimes be a barrier to people cycling to their local station. People need to feel that their bike will be safe when parked at a station. Centro is committed to ensuring that all our new cycle parking is secure, installed at visible locations and covered by CCTV where possible.

In partnership with British Transport Police, Centro is working to reduce cycle crime at stations. We are implementing a range of initiatives including Cycle Surgeries, where passengers can have their bikes security marked free of charge, safe cycle parking posters, reduced D-Lock offers and a trackable decoy bike to deploy at stations where cycle theft is a problem. Results to date indicate a positive reduction in cycle crime at stations, with a **32.7% reduction in cycle crime** from April 2012 to June 2012 compared to the previous year.

3.4 Bikes on public transport

At the present time, bikes are allowed on most trains, but policies differ between rail companies and there are often restrictions about taking bikes on busy trains due to lack of room. This is also the reason bikes are not allowed on buses or the Metro – although folding bikes are allowed on the Metro.

Many cyclists would like to take their bikes on to buses, trains and the Metro tram so they can cycle onward to their final destination. Centro actively work with operators to ensure that the needs of cyclists are best met. We promote train operator policies to cyclists, so they know the best times to travel on the train with their bikes.

3.5 Cycle Hire

In many European and UK cities, people can now hire bikes at train, bus or tram stations to travel about city centres quickly and easily. Centro is working with its partners to introduce cycle hire at suitable transport locations in the West Midlands.

In September 2012, Centro supported the charity Cycle Chain to launch their innovative **'Floating Cycle Hub'** barge from Cambrian Wharf in Birmingham city centre, which offers cycle repair, purchase, parking and hire as well as training opportunities for young people. We believe this is one of the first such floating facilities in the UK, and are continuing to work with Cycle Chain to raise awareness of this unique service among local communities, employers, commuters and visiting tourists.

3.6 Promoting sustainable access to stations

Centro wants to encourage more people to travel by rail – over 70% of people in the West Midlands live within one mile of a rail station. However, lack of awareness on how to reach the station, poor walking and cycling routes and facilities, as well as overcrowding at car parks can discourage many potential rail passengers.

Centro was one of the first places in the country to pilot a 'Station Travel Plan' at Kings Norton station. This aimed to encourage more local residents to use the station and increase the numbers of passengers travelling to the station by foot, bike, bus and car-sharing. In partnership with Birmingham City Council, London Midland and the local community, we invested in improvements to local walking routes to the station, cycle parking, signage and way-finding, car-share bays within the Park & Ride, bus real-time information for those interchanging between bus and rail, CCTV and lighting improvements to address safety and the perception of safety. A striking sustainable travel themed mural, designed by local students was added to the station footbridge in August 2012.

This was supported by an extensive Smarter Choices campaign under the ***'Bus it, Bike it, Walk it, Share it'*** strap line, and included a programme of led walks and led cycle rides from the station. Recently shortlisted for an award at the National Transport Awards, monitoring of the Station Travel Plan has indicated positive increases in sustainable travel to the station and positive levels of satisfaction among Kings Norton rail users with the improved station environment.

As part of the LSTF *Smart Network, Smarter Choices* programme, we will be implementing Station Travel Plans across a number of other rail stations and Metro stops across the network. This will take into account best practice and lessons learnt from the Kings Norton pilot, in addition to the overall national ATOC-led pilot programme.

Centro also recognises that to encourage more people to cycle to their local rail station, Metro stop or Bus Station, more needs to be done to improve cycling routes to public transport. Building on our successful Walking Improvement Fund, we are currently seeking internal funding for a new **Cycle Improvement Fund**. This new fund will enable us to work in partnership with Councils and the Canal & River Trust to make simple but effective improvements to cycle routes to stations – linking the public transport network to local residents, schools and employment sites.

3.7 Cycle training

Many people may have not ridden a bike for several years, and therefore may lack the confidence to cycle on busier roads, even for short journeys to their local rail or bus station. Cycle training can provide people with the skills and confidence to cycle for leisure and commuting trips. Even experienced cyclists can learn how to influence traffic, and enjoy cycling more, by riding confidently, skilfully and safely.

Centro works with local partners to provide and promote cycle training to adults and children, giving people the confidence to start cycling – whether you are a beginner or more experienced, Centro can put you in touch with a local cycle trainer. For example, in 2011 we secured funding in partnership with the West Midlands Councils to promote free adult cycle training to employers implementing Travel Plans, and will be extending this successful initiative as part of the LSTF *Smart Network Smarter Choices* programme (please see section 4 for more details).

3.8 Promoting cycling

Providing clear, relevant information, along with targeted marketing and promotion of the benefits of cycling are key to encouraging more people to cycle. Centro currently promotes cycling through a number of initiatives including:

- Our new online cycling video 'Meet Matt' http://www.youtube.com/watch?v=71y3qAB-hcg&feature=player_embedded

- Producing a range of printed leaflets and online information to help people cycle, as outlined in section 3.1

- Providing incentives to support people cycling, such as 'Free Your Bike' cycling starter packs

- Holding regular events, campaigns and competitions to encourage people to try cycling – and keep cycling. For example, we are currently running a Winter Cycling campaign across the rail network, offering support and advice for people cycling in the colder weather with a number of cycling prizes on offer.

- Attending cycling events – for example at Sky Ride in August 2012, Centro's Sustainable Travel team engaged with over 700 people to promote and support local residents to cycle.

Through the LSTF *Smart Network, Smarter Choices* programme, we will be developing targeted cycling campaigns to residents living, working and learning along the ten LSTF corridors – utilising a segmented approach to identify those 'near market' cyclists and provide them with the support and incentives to start cycling. Through the LSTF Personalised Travel Planning projects, we will also be offering tailored cycling support (including route planning and free adult cycle training) to residents living along six of the LSTF Corridors.

3.9 Pershore Road Travel Choices project

The Pershore Road Travel Choices (PRTC) project ran from May 2011 to July 2012, piloting a range of Smarter Choices measures along the Pershore Road corridor (A441 / Bus routes 45 and 47) to encourage modal shift to sustainable travel modes. Smarter Choices are techniques for changing travel behaviour, commonly implemented via workplace, school and personal travel planning, marketing campaigns and cycling and walking initiatives. The project delivered the following travel support (including cycling support) to local residents, workplaces and schools along the corridor:

- **5,187 residents actively engaged** (i.e. requested travel information or incentives such as cycle training) in our Personalised Travel Planning (PTP) campaign following a conversation with one of our Travel Advisers about their travel habits. These individuals requested over 20,000 items of sustainable travel literature. **Up to 28% of these residents reported that they had changed their travel behaviour as a result of this PTP support**.

- **Over 500 pupils participated in Centro's sustainable travel journey planning workshop**, to help them in the move from primary to secondary school.

- **26 schools and large employers** in the area received Travel Plan support and advice to help reduce car trips and promote sustainable travel, including cycling, to their sites.

- **12 schools and businesses were awarded Travel Plan grants** to fund equipment (e.g. cycle stands) to support travel plan activity.

- **Over 600 children and adults** participated in cycle training, bike maintenance sessions/training, or other cycling support (e.g. led rides).

  "The training went really well. There were seven of us, mostly staff and one volunteer. The instructors were amazing and very patient. One of our group was extremely nervous about going onto the roads but they encouraged her to join us. She told me today she has kept it up and gone on the roads every night since for a ride with her husband. Brilliant

- As part of the continued community engagement and legacy work, the team have attended **18 local community events and meetings**, providing travel advice and information to over **3,000 local residents**.

All initiatives were promoted by an extensive marketing campaign, which included bespoke tailored local travel literature, on-route advertising, door drop leaflets to over 40,000 local residents and social media activity. As one of the LSTF *Smart Network, Smarter Choices* corridors, we will continue to engage with and support residents, workplaces and educational sites along the Pershore Road.

3.10 Cycling – regeneration and new developments

Centro will continue to advocate walking and cycling as part of the wider transport and regeneration agendas by:

- Providing input into each Council's Sustainable Community Strategy

- Requesting that planning applications for new developments consider providing good walking and cycling links to nearby public transport facilities

- Ensuring that pedestrian access, good signage and cycle storage are all considered and designed into any of Centro's public transport developments.

This will help to ensure that walking and cycling is better integrated into public transport – making getting around easier for everyone.

4. LSTF *Smart Network, Smarter Choices* and Cycling

The West Midlands has recently been successful in securing £33.2m for *Smart Network, Smarter Choices* through the Local Sustainable Transport Fund (LSTF). This funding award is an excellent achievement and will be boosted by another £19m from local public and private sector contributions. This overall package of over £50m will deliver a range of sustainable transport initiatives and projects by March 2015.

The *Smart Network, Smarter Choices* project has been drawn up by Centro in close collaboration with the Birmingham, Coventry, Wolverhampton, Sandwell, Walsall, Dudley and Solihull councils as well as private rail and bus operators. Stakeholder engagement with local business groups, employers, schools, cycling groups and the health sector has also played a significant part in shaping the project. The project involves carrying out a wide range of sustainable travel schemes along key corridors in the West Midlands to help underpin economic growth, job creation and meet tough

carbon reduction targets. Work will be aimed at improving public transport services, walking and cycling routes and the general flow of traffic. Schemes aimed at influencing people's travel behaviour, especially in favour of green choices for short trips, will also be carried out.

Smart Network, Smarter Choices will also improve journey times and support modal shift to public transport, walking and cycling. These improvements will improve access to labour markets by providing enhanced sustainable connectivity to local, major and key employment centres along key strategic corridors and support the Government's key objectives of economy and carbon reduction. *Smart Network, Smarter Choices* has identified ten strategic corridors across the West Midlands conurbation – these are:

- Airport & NEC Corridor (A45)
- South Birmingham Technology Corridor (A38/A441)
- Warwick Road Corridor (A41 South)
- North Solihull Regeneration Corridor (A452)
- Walsall Road Corridor (A34 North)
- Black Country West (A4123/A459)
- Wolverhampton to West Bromwich Growth Corridor (A41 North)
- Corridor 404 (Walsall to Brierley Hill)
- Connecting Dudley with Birmingham (A457)
- Coventry North Corridors

A tailored package of integrated measures has been developed for each of the corridors. These measures include:

- New or improved walking and cycling routes
- Small scale road and junction improvements
- Better passenger waiting facilities
- Expert travel planning for families, companies and schools
- Free travel support for job seekers
- More mobile and real time transport information
- Smartcard technology for cashless travel

These schemes will help people to make smarter and greener travel choices which can cut congestion and improve traffic flows for essential road users such as hauliers and bus operators. To help bring about this change in travel behaviour we will work closely with families, schools, businesses and community groups to provide them with the expert support and advice they need. *Smart Network, Smarter Choices* can also bring substantial benefits for the environment and people's health.

Work is progressing on mobilising the teams to ensure effective and efficient delivery of the programme within the Local Sustainable Transport Fund (LSTF) timescales. The LSTF Programme provides a wonderful opportunity to increase the popularity of cycling across the West Midlands and to embed a culture of cycling across the region. The sections below outline the cycling support that will be available for people living, learning and working along the ten LSTF corridors.

4.1 LSTF Infrastructure improvements to make cycling easier and safer

Each District is leading on infrastructure improvements along the LSTF Corridors to make cycling easier and safer, and enable better connections for local residents to employment and educational sites, local facilities and the public transport network. For example along the A38 Bristol Road corridor, Birmingham City Council will be:

- Enhancing and extending existing cycle facilities along A38 Bristol Road Corridor
- Introducing more 'shared-use' cycle facilities on the footways, improvements to on-carriageway facilities where 'shared use' cannot be provided, and upgrading pedestrian crossings to 'toucans' to provide better links across the corridor
- Improving cross-links for cyclists between Bristol Road, Pershore Road, the Rea Valley Route and the Worcester & Birmingham Canal
- Investigating improved canal access steps / ramps adjacent to University and Selly Oak railway stations
- Increasing cycle parking, particularly in Local Centres, at Railway Stations, and at other main destinations.

4.2 LSTF Cycling support for local Employers

Centro already works in partnership with Local Authorities to support local companies and employers to produce and implement Travel Plans through the award winning **Company TravelWise** scheme. Travel Plans deliver positive impacts on staff morale and health, on company and personal costs, and, of course, on public transport patronage, active travel use and reductions in congestion and carbon.

The Government offers a 'Cycle to Work' scheme, where employees can take advantage of tax-free loans to buy a new bike for commuting to work. Centro promotes the Cycle to Work scheme across the region to companies affiliated to Company TravelWise, and to cyclists travelling to stations, Metro stops and bus stations as part of their journey to work.

Within the LSTF *Smart Network Smarter Choices* project, there will be a focus on delivery of Employer Travel Plan engagement and a package of support services across all 10 corridors from September 2012 to March 2015. Building on the existing Company TravelWise scheme, Employer Travel Plan activity will focus on engaging with the top ten employers on each corridor, and with SMEs located in industrial estates, business parks and local centres along each corridor. Activities will include:

- Development and implementation of enhanced employer travel plans, including robust monitoring arrangements.
- Provision of grants to employers to enable sites to implement measures within their travel plans that will have the greatest impact on modal shift (e.g. cycle storage and training).
- Creation of Top Cycling and Walking Employers, providing one to one support to promote and facilitate a culture of active travel and create a legacy in the establishments beyond the LSTF period.
- Development and support for Workplace Cycle Champions
- Free adult cycle training Bikeability Level 1 to 3
- Dr Bike Sessions / bike checks

- Cycle route planning and Cycle Buddies
- On site cycling promotional events and incentives
- Cycle Instructor training and Bike Maintenance training
- Cycle to work scheme advice and support
- Discounted cycle equipment and accessories for employers and their staff.

4.3 LSTF Cycling support for local Schools, Colleges and Universities

Centro's Young Person's Delivery Plan is a 3 year project building upon the excellent work the Sustainable Travel Team has already undertaken with schools over the last seven years. It is developing new initiatives to improve Centro's engagement with young people in order to encourage lifelong sustainable travel users. By investing in young people now, we are looking to create a step change in behaviour and are working to secure a future generation of sustainable travel users. Our activities are structured around delivering four key objectives:

1. Encouraging and supporting young people to use sustainable travel modes at key life changes
2. Achieving a step change in the travel behaviour of young people and their families towards sustainable travel
3. Achieving Sustainable Travel Change behaviour in educators
4. Influencing services and products provided by Centro and its partners to ensure that they meet young persons' travel needs

In addition to the above, within the LSTF project there will be a focus on the delivery of Education Travel Plan engagement and a package of support services across all 10 corridors from September 2012 to March 2015. Education Travel Plan activity will focus on engaging with young people aged 14 or attending Secondary schools, Colleges and Universities. The key priority will be to focus on access to employment and skills in order to meet with the key economic objectives of LSTF. Activities include:

- Development, implementation and monitoring of enhanced educational travel plans.
- Development and delivery of a Travel Transition resource to prepare students for their transition to further education, training and employment.
- Provision of grants to secondary schools, 6th forms, colleges and universities to enable them to implement measures within their travel plans that will have the greatest impact on modal shift (e.g. cycle storage and training).
- Creation of Top Cycling and Walking Education Establishments providing one to one support to promote and facilitate a culture of active travel and create a legacy in the establishments beyond the LSTF period.
- Free student and staff cycle training Bikeability Level 1 to 3
- Dr Bike Sessions / bike checks
- Cycle route planning and Cycle Buddies
- On site cycling promotional events and incentives
- Cycle Instructor training for staff and Assistant Instructor training for students
- Cycle to work scheme advice and support for staff
- Discounted cycle equipment and accessories for students and staff.

4.4 LSTF Workwise Cycling support for the unemployed

The award winning WorkWise service helps unemployed people return to work by providing travel advice and support, enabling them to find, start and stay in work. WorkWise offers a range of travel assistance to jobseekers including:

- Personalised information advice and journey planning for travelling by bus, train, tram, on foot or by bike
- Free day tickets to attend interviews
- Free monthly travel passes for up to the first three months of a new job

As well as helping the economy by getting people into work, WorkWise encourages green, congestion busting travel, with 88% of customers continuing to make sustainable travel choices after six months in their jobs. In a 2009 survey, 91% of customers say WorkWise support had made a ***'significant impact on their life'***[1].

Since the start of the scheme in 2003, WorkWise has issued over 8,800 day tickets helping people to attend interviews and nearly 12,000 people to travel to a new job. Since 2011, we have also offered a Travel Training service to Advisers working in Job Centre Plus offices and Employment and Training Providers, to enable them to assist their customers to plan their journeys to interviews and new jobs, and work out the best value tickets for their customers.

During 2011 and 2012, WorkWise has been available in North Solihull, Sandwell, and Walsall. Thanks to recent LSTF funding, from September 2012 WorkWise is now also available for people living in eligible wards in Birmingham, Coventry, Sandwell, South Solihull, Walsall and Wolverhampton. From 2013, a package of tailored cycling support for unemployed people will also be offered as part of the LSTF project. This will include free cycle training, bike loan/hire, bike buddying, journey planning and support for purchasing cycle accessories such as helmets, lights, locks and panniers. We aim to assist over 1,300 people into employment via tailored cycling support up to March 2015.

5. Centro's future plans for cycling

Centro's focus to date has been on improving the integration of cycling with public transport. Within this remit, we have implemented a wide range of initiatives to promote and support people wishing to make a combined public transport / cycle journey.

The West Midlands Local Transport Plan 3 has a target to increase the numbers of people walking and cycling across the Metropolitan area by 2016. Centro recognises that much more needs to be done to enable more people to cycle and walk across the region.

The LSTF *Smart Network Smarter Choices* programme presents a key opportunity to deliver a step change in the provision and support for existing and potential cyclists along the ten LSTF corridors. We want to build on this opportunity for cyclists across the West Midlands.

[1] Evaluating performance – Qualitative Study of WorkWise in North Solihull, MVA, October 2009

As part of Birmingham City Centre's **Vision for Movement,** we are currently working closely with Birmingham City Council and Sustrans to develop a City Centre Cycling Strategy to improve access for existing and potential cyclists – both into the city and around the city centre itself. As part of this, we are developing concepts for improved cycle parking provision and cycle hire within the city, including a Brompton Dock Pilot and cycle parking/hire as part of the One Station Moor Street / New Street link.

We are seeking funding to implement a Brompton Dock pilot in Birmingham City Centre in 2013/14, which will provide a fully automated, sustainable cycle hire scheme that allows members to hire Brompton folding bikes. The dock will house 20 Brompton bikes within a secure locker facility accessed via mobile phone texting technology – enabling local residents, commuters and visitors to the city centre to hire bikes for their journeys via a fast, flexible, convenient and secure system.

As part of the One Station project (Moor St/New St Link), we are working with partners to introduce high quality public realm treatments throughout the existing tunnel – including a Cycle Hub that is supported by Birmingham-based bike retailer 'On Your Bike' which will offer cycle parking, hire, repair and cycle retail space.

We recently held a Cycling Twitter Question and Answer Session with the online cycling community, and want to broaden and extend this engagement with local cyclists. We want to work with Councils and other stakeholders (including CTC, Sustrans, Push Bikes and other cycling and walking organisations) in 2013 to develop a joint vision for cycling and walking in the West Midlands.

From this shared vision, we will then develop a West Midlands Active Travel Action Plan, outlining clear targets and the resources required to truly make walking and cycling commonplace in the region.

6. Conclusion

Resources for cycling and walking – Centro will provide funding to ensure the continued integration and promotion of walking and cycling with public transport. We will continue to develop our market research programme to monitor demand, gather customer feedback and identify opportunities to improve our walking and cycling activities.

We will actively engage with local Councils and third sector cycling organisations (including CTC, Sustrans and Push Bikes) to drive forward and improve our Cycling programmes.

Partnership working – our Sustainable Travel Team works with local councils and other organisations to promote 'smarter travel' initiatives. These initiatives support and encourage people to change their travel behaviour, and include:

- The promotion of walking, cycling, car-sharing and public transport
- Travel plans for workplaces, schools, universities, hospitals, housing estates, community groups, shopping centres and leisure attractions.
- Personalised journey planning
- Smarter working (including teleworking / home working / flexible working).

Centro will continue to develop joint projects with councils, cycling and walking organisations, local communities and transport operators to better integrate cycling and public transport, and to promote and enable an increase in cycling across the West Midlands – ultimately improving everyone's journeys.

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Background Papers: LSTF Business Case *Smart Network, Smarter Choices*
Centro's Cycling and Walking Action Plan
Centro's Young Person's Delivery Plan