

Exploring the relationship between leisure and commuter cycling

Policy Analysis Research Summary, October 2011

Introduction

Evidence suggests that the increase in cycling in London has come from existing cyclists cycling more often rather than a net increase in the number of cyclists. In order to meet the challenging targets for cycling (a 400% increase in trips between 2001 and 2026 and a 5% mode share), TfL urgently needs to attract new and emerging markets to cycle. Initiatives to encourage the take-up of cycling are typically targeted at one of two markets: cycling for **leisure** (pleasure and general exercise) or cycling for **utility** (for a purpose). Sky Rides, for example, have been effective in attracting leisure cyclists, while the Barclays Cycle Hire scheme is well-used by commuters. Increasing utility cycling in London is key to achieving the targets. This note explores the relationship between leisure and utility cycling, and considers whether activities that encourage leisure cycling will naturally lead to an increase in commuter cycling.

How many and how often do people cycle?

Nearly a fifth (23%) of Londoners have cycled in the past year¹ but more people cycle for leisure than for commuting. TfL's Cycling Behaviour Survey² found that half of those who ever cycle in London cycle frequently (at least once a week) for leisure/fun/exercise, while around a third cycle frequently to work. There are considerably more cyclists in London who 'never' cycle to work (46%) than 'never' cycle for leisure (6%). Recent DfT research³ found that two-thirds of those who can ride a bike agreed that they 'would enjoy cycling as a leisure / holiday activity'.

Topical LSE research⁴ estimates that frequent cyclists in the UK are primarily commuter cyclists and enthusiasts who cycle for sport / passion (Table 1). Recreational and family cyclists tend to cycle less often than commuter cyclists. To meet the cycling targets, regular and occasional cyclists must be encouraged to cycle for other purposes (e.g. commuting), and consequently, to cycle more frequently.

Table 1: Proportion of adult cyclists across cycling segments, UK

| | Frequent cyclist (cycles at least once a week) | Regular cyclist (has cycled at least 12 times in the last year) | Occasional cyclist (cycles less often) |
|---------------------------|--|---|--|
| Commuter | 43% | 40% | - |
| Recreational user | 5% | 37% | 70% |
| Family | 2% | 15% | 30% |
| Enthusiast | 50% | 8% | - |
| Approx. size of UK market | 3.5 million | 4.3 million | 5.4 million |

Source: *The British Cycling Economy*

Infrequent cyclists tend to cycle for leisure purposes only and while many non-cyclists see cycling as an enjoyable leisure activity, fewer recognise it as a realistic and practical mode of transport. The challenge for TfL and the London Boroughs is to encourage non-cyclists to start cycling and persuade the large number of infrequent cyclists to cycle more often and for other purposes.

What are the motivations for and barriers to cycling?

Research by Anable and Gatersleben (2005) found that travellers consider different factors when selecting their preferred mode of transport for a leisure or commute trip. For work trips, convenience is paramount, while for leisure travel, relaxation, a sense of freedom and 'no stress' are as important as

¹ TfL (2011) *Travel in London, Supplementary Report: London Travel Demand Survey (LTDS)*

² TfL (2010) *Cycling Behaviour Survey, Survey analysis 1: profiling - final report*

³ Department for Transport (2010) *Climate Change and Transport Choices Interim Report*

⁴ London School of Economics (2011) *The British Cycling Economy*

convenience⁵. Notably, Gardner's 1998 study of 500 cyclists found a conflict between the image of leisure cycling as calm, peaceful and liberating, and of utility cycling as dangerous, demanding, stressful and requiring immense self-discipline⁶.

Leisure cyclists tend to cycle for health, fitness and enjoyment, while utility cyclists are motivated by cost and journey time savings, reliability, fitness/health⁷ as well as changes in personal circumstances⁸.

Barriers to cycling are primarily safety concerns associated with traffic and crime and the lack of facilities for cyclists (e.g. parking, cycle paths). Personal circumstances (e.g. health, disability) and not owning or being able to ride a bike are obstacles for non-cyclists, while frequent cyclists are deterred by inclement weather and journey time⁹. Barriers that specifically deter commuters from cycling are the need to carry items, the distance (too far to cycle), the need to dress smartly, concerns about appearance¹⁰ and out-of-work commitments¹¹.

While some of the factors that encourage and discourage the take up of cycling apply to both leisure and utility cycling (e.g. skills and confidence, convenience, health/fitness), others, such as cost, journey time, facilities at the destination and concerns about appearance, more actively impact on the uptake of utility cycling. Factors such as enjoyment and relaxation are more important for leisure cycling.

How do cyclists overcome the barriers to utility cycling?

With these barriers in mind, it is interesting to consider what stimulates a new cyclist to start cycling. Research has shown that a specific experience or event can act as a prompt, leading the individual to find his/her own ways of confronting the barriers. Catalysts include key life events and changes in lifestyle (e.g. new job or home) or personal circumstances (e.g. finances) as well as changes in personal attitudes (e.g. a desire to improve fitness) and the transport environment (e.g. reduced frequency of an existing bus service). The act of cycling itself allows new cyclists to overcome some of the barriers: as people progress from *considering* cycling to work to *actually* cycling, their attitudes towards cycling become more positive and their perceptions of the various barriers change¹².

In London, initiatives such as Cycle Superhighways and Cycle Hire have attracted many cycle commuters and new cyclists. Over 80% of the trips made on the first two Barclays Cycle Superhighways are for commuting purposes¹³ and 8% of CS7 users and 14% of CS3 users have transferred from another mode. Two-thirds (67%) of Cycle Hire users are commuters, while over half are relatively new to cycling¹⁴. Some Greenways also attract utility cyclists - over half of the Kingston cyclist users and a third of the Brent cyclist users are commuters¹⁵ - but this is largely dependent on the characteristics of the areas in which they are located.

Elsewhere, Victoria Ride to Work Day, Melbourne¹⁶, an event specifically designed to encourage commuter cycling, has proved successful. Around 20% of participants in 2005 were riding to work for the first time and a follow-up survey showed that 27% of them were still cycling to work five months later. The event prepared first-timers for cycling to work and motivated others to resume, continue or cycle more frequently. Overall, 86% of respondents had either progressed or maintained their cycling to work habit over the following year.

⁵ Anable, J. & Gatersleben, B. (2005) All work and no play? The role of instrumental and affective factors in work and leisure journeys by different travel modes, *Transportation Research Part A: Policy and Practice* 39

⁶ Gardner, G. (1998) *Transport Implications of leisure cycling*, TRL report 347

⁷ TfL (2008) *Cycling in London*

⁸ Challenge for Change (2011) *The Finding New Solutions Leisure Cycling Programme, Interim Report*

⁹ TfL (2010) *Cycling Behaviour Survey, Survey analysis 1: profiling*

¹⁰ TfL (2010) *Cycling Behaviour Survey, Survey analysis 2: trip switching*

¹¹ Bicycle Victoria (2006) *Report on follow-up survey of Ride to Work Day 2005 registered participants*

¹² Gatersleben, B. & Appleton, K. (2007) Contemplating cycling to work: attitudes and perceptions in different stages of change, *Transportation Research Part A: Policy and Practice* 41(4), p 302-312.

¹³ TfL (2010) *Travel in London Report 3*

¹⁴ TfL (2010) *Barclays Cycle Hire customer satisfaction and behaviour Autumn 2010* (Wave 1 – cycle hire members only). One third of respondents to the travel behaviour survey had begun cycling in London within the last month and a further 25% within the last three months.

¹⁵ Data supplied by Sustrans

¹⁶ Bicycle Victoria (2006), *Report on follow-up survey of Ride to Work Day 2005 registered participants*

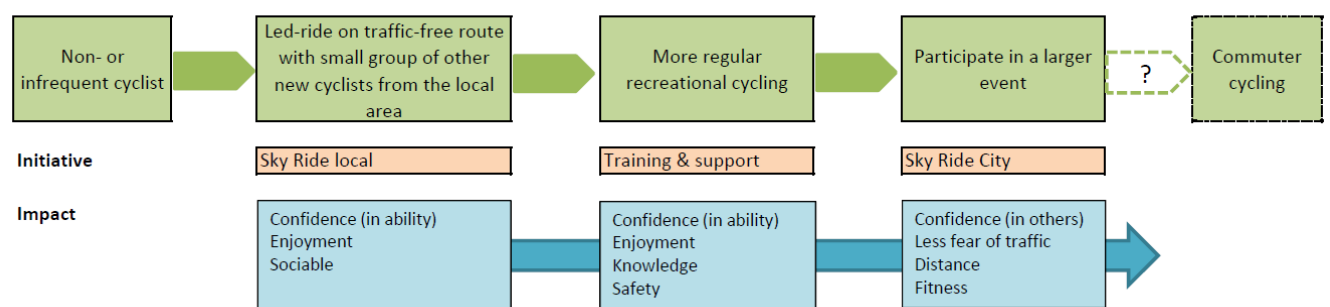
However, emerging evidence from the Finding New Solutions workplace projects suggests that for many, a jump direct to cycle commuting is too large a step. Work programmes have been restructured to promote cycling for health/fitness with more leisure focused activities for staff and their families. Once engaged, support and initiatives to encourage cycling to work were introduced¹⁷. Similarly, British Cycling runs workplace initiatives such as lunchtime led rides to encourage employees to take up recreational cycling, after which they are given support to start cycling to/from work.

By providing the infrastructure (e.g. designated route), equipment (bicycle), motivation and social aspect (event), new cyclists are able to directly overcome the practical barriers to utility cycling. However, the schemes in London are appealing primarily to the 'near market' of young professional men; those in the Urban Living segment. For other demographic groups, the direct transition from non-cyclist to commuter cyclist is perhaps a step too far.

Other routes to utility cycling

It has been suggested that instead of attempting to tackle the barriers (which are very personal and therefore vary considerably from one person to the next), encouraging casual cycling without commitment ('give it a go' campaigns) can be powerful tools¹⁸. As safety concerns are the greatest barrier to cycling, participation in fun and informal leisure cycling events can prepare cyclists for more serious utility cycling by raising their confidence and allowing them to overcome some of their concerns about safety and traffic. British Cycling advocates a gradual progression from irregular to regular (once a month) to frequent (once a week) cycling, using events such as Sky Rides, training and support to help cyclists gain enough confidence to eventually start cycling on trafficked routes to and from their workplace (Figure 1).

Figure 1: Progression from non-cyclist to frequent cyclist



Gardner found that leisure cycling has an important role to play in fostering or preserving the 'cycling habit' and increasing the enjoyment of cycling, and in doing so, might initiate cycling for other purposes. He found that many people who cycle for utility purposes claim to have been influenced by their previous experience of leisure cycling¹⁹. Research in Korea²⁰ found that 57% of commuter cyclists had enjoyed leisure cycling on a regular basis prior to commuting by bike and the authors suggested that to realise modal shift, targeting experienced leisure cyclists may be more effective than targeting all commuters²¹. Sustrans also found that the vast majority of 'every day cyclists' (those making regular trips to work, school, shopping) had previously been recreational cyclists²².

¹⁷ Information provided by email from Challenge for Change

¹⁸ TfL (2009) *Exploring the journey into cycling with new cyclists*

¹⁹ Gardner, G. (1998) *Transport Implications of leisure cycling*, TRL report 347

²⁰ Park, H., Lee, Y., Shin, H. and Sohn, K (2011) Analyzing the time frame for the transition from leisure-cyclist to commuter-cyclist, *Transportation* 38 (2), p306-319

²¹ Lee, Y, Park, H. and Sohn, K (2010) Increasing the number of bicycle commuters, *Proceedings of the Institution of Civil Engineers- Transport, Paper 1000024*

²² Sustrans (2011) *Exploring the Pathways to Everyday Cycling in Adulthood: the effect of cycling activity as a child and/or the effect of positive leisure cycling experiences*

There is evidence that cycling events encourage the uptake of, and more frequent, cycling. Research with a sample of Sky Ride participants²³ found that 13% cycled more frequently following the ride, primarily for leisure/social trips. 'Novice riders' participating in the mass recreational Spring Cycle event in Sydney²⁴ cycled significantly more in the month after the event and half of those who had a 'low' cycling ability at baseline rated themselves as 'high' a month after the event.

The Finding New Solutions²⁵ Leisure Cycling Project has explored whether a positive leisure cycling experience leads to increased everyday cycling. A range of initiatives including cycling events, training and support, promotion and new infrastructure, have been effective in increasing the frequency of leisure cycling, e.g. 38% of non-cyclist participants reported cycling at least once a week in the follow up survey one year later. Though the project does not yet have evidence that increased leisure cycling leads to growth in every day cycling, some participants have reported increases in cycling for utility (15% cycle to work more than they previously did).

A large scale cycle training programme for young people and adults in Merseyside resulted in a 63% increase in leisure cycling (and a 37% increase in utility cycling). Many participants have become frequent cyclists, with 92% cycling at least once a week for leisure and 51% for utility²⁶. More localised initiatives (such as Breeze bike rides for women and Sky Ride Local) have also been effective in encouraging new cyclists to take up recreational cycling and Sky Ride Local research²⁷ suggests that nearly 40% of frequent cyclist respondents had been inspired to try cycling to work. These initiatives can be particularly effective in targeting specific demographic groups outside the 'near market' e.g. women, people from disadvantaged and black and minority ethnic (BME) communities.

Many commuter cyclists have previous experience of cycling for leisure, which equips them with the proficiency and confidence they need to progress to utility cycling. Leisure cycling initiatives can encourage non-cyclists within and outside the 'near market' whose main barrier to cycling is a lack of confidence or skills to start cycling. But barriers are deeply personal and those who are deterred by more emotional or physical constraints will not necessarily progress in the same way.

Who could cycle for utility (what is the market)?

Existing cyclists, both infrequent and frequent, have already overcome many of the barriers to cycling, typically own or have access to a bike, are much more likely to consider cycling a trip²⁸, and therefore present a more likely target for encouraging the progression from leisure to utility cycling. Though frequent cyclists already make the majority of cycle trips in London they currently make 100,000 commute trips every day by car or public transport that are 'potentially cyclable'²⁹.

However, as only 10% of the 'total potential' cycle trips (currently cycled and potentially cyclable trips) are being cycled at present³⁰, those who cycle infrequently or rarely need to be engaged in cycling to realise the challenging targets for London.

Many of the potentially cyclable trips are made by women, ethnic minorities, younger and older people, and those on a lower income³¹. TfL research has identified two groups - Urban Living and Young Couples and Families - with the greatest propensity to cycle at present and in the future. The Urban Living segment represents 23% of the London population and makes nearly a third (31%) of all potentially cyclable work trips. Similar to the TfL segmentation, a Korean study found that young

²³ GfK NOP/TfL (2011) *The Effect of Sky Ride Events on Cycling Behaviour*.

²⁴ Bowles, H, Rissel, C & Bauman, A. (2006) Mass community cycling events: who participates and is their behaviour influenced by participation *International Journal of Behavioural Nutrition and Physical Activity* 3(39).

²⁵ Challenge for Change (2011), *The Finding New Solutions Leisure Cycling Programme, Interim Report*

²⁶ Merseyside Transport Partnership <http://www.letstravelwise.org/newsarticle.php?articleID=1078>

²⁷ British Cycling (2011) *Using Recreational Cycling Programmes to 'Fuel' Utility Cycling*, research note for TfL

²⁸ TfL (October 2010) *Cycling Behaviour Survey, Survey analysis 1: profiling - final report*. 73% of frequent cyclists and 60% of infrequent cyclists expressed a willingness to cycle, compared to just a third of non-cyclists

²⁹ TfL (2010) *Analysis of Cycling Potential*

³⁰ TfL (2010) *Cycling Behaviour Survey, Survey analysis 1: profiling*

³¹ TfL (2010) *Analysis of Cycling Potential*

white-collar workers who live in high-rise apartments and enjoy leisure cycling in groups are a good target for the promotion of commuter cycling³².

Recent LSE research³³ has identified that participation in cycling can be increased amongst several 'micro-segments' that currently participate as occasional cyclists. These include:

- The 'hesitant cyclist' – typically affluent females aged 35–44 for whom the main barrier is safety; a potential key catalyst to increasing cycling amongst the 'family' sub-segment;
- The 'busy dad' – who does not have time to cycle more frequently – but displays attributes conducive to cycling more regularly for recreation and commuting;
- 'Young active lifestylers' – young, busy people who tend to cycle sporadically at present but could be converted to commuter cyclists, and encouraged to cycle specifically through cycling events, rental schemes, social and recreational cycling.

There is considerable potential for cycling levels in London to be increased and efforts to engage a number of different groups should be pursued. As the motivations and barriers are very personal, initiatives should be specifically tailored to attract different groups. Both initiatives that encourage non-cyclists *outside* the near market to start leisure cycling and those that specifically target non-cyclists *in* the near market to cycle for utility are required if London's cycling targets are to be met.

Conclusions - will activities that encourage leisure cycling naturally lead to an increase in commuter cycling?

It is clear that leisure/recreational cycling is, for many, a valid entry point into cycling and initiatives to encourage cycling for leisure, health and fitness *should* result in longer term increases in utility and commuter cycling. Participation in leisure cycling allows inexperienced cyclists to overcome some of the practical and emotional barriers to cycling (e.g. confidence, fear of traffic, ability) and is therefore an effective means of encouraging non- and infrequent cyclists, particularly those who are not in the 'near market' demographic group, to prepare themselves for cycle commuting. But as the barriers and motivations to cycle are very personal, and differ for utility and recreational cycling, it is clear that the promotion of leisure cycling will not remove *all* the barriers or indeed result in the conversion of *all* leisure cyclists to utility cyclists. While obstacles such as distance, out-of-work commitments, the difficulty of carrying items/equipment and concerns about one's appearance at work will remain, involvement in recreational cycling may remind some cyclists that the benefits of cycling (enjoyment, fitness, time and cost savings) outweigh the negatives, thereby encouraging them to try utility cycling.

However, the need for a varied approach is clear as there is a significant proportion of non-cyclists who do not need to progress 'gently' from leisure to utility cycling and instead are able to make the direct transition from non-cyclist to utility cyclist. These potential utility cyclists are typically from the 'near market' demographic groups and are currently deterred by various practical or physical barriers. They represent a market that can be primed directly by removing some of the practical barriers to utility cycling, such as less trafficked routes and the provision of facilities at their workplace (cycle parking, lockers, showers).

³² Park, H., Lee, Y., Shin, H. and Sohn, K (2011) Analyzing the time frame for the transition from leisure-cyclist to commuter-cyclist, *Transportation* 38 (2), p306-319

³³ London School of Economics (2011) *The British Cycling Economy*