PARLIAMENTARY COMMISSION ON PHYSICAL ACTIVITY: OPEN CALL FOR EVIDENCE

Deadline: 31st December 2013

The Parliamentary Commission on Physical Activity has been established to look at ways of urgently tackling declining levels of physical activity and make direct, policy-based recommendations to tackle the crisis in the UK.

The terms of reference of the Commission are to consider and report on:

a) the evidence relating to the impacts of physical (in)activity;
b) lessons to be learned from best practice around the UK and across the globe in relation to increasing levels of physical activity;

and to make recommendations for legislative and other action.

The Commission would welcome responses from interested organisations and individuals to the following initial questions:

1. How can we encourage more people to be physically active, on a regular basis?

2. What fundamental policy changes need to be made to increase the levels of physical activity across the UK?

3. What existing best practice is being delivered in or across Sport, Health, Transport/Urban planning and Education which addresses the issue of physical inactivity? How and why are these examples successful?

4. What are some examples of excellent initiatives that have failed and why have they been unsuccessful or not lasted?

5. In a world with limited financial resources what are the most cost-effective approaches and how can existing resources be realigned to have the greatest impact?

Making a submission

A copy of the submission should be sent by e-mail to physicalactivityevidence@fleishman.com and marked "Physical Activity Commission" then "Your Organisation", for example: *Physical Activity Commission: The Young Foundation*

Written evidence submitted should be no longer than 2,000 words in length and

- Have numbered paragraphs
- Be provided electronically in MS Word, Open Office or Rich Text format (No PDFs)
- Include (where relevant) a full, numbered list of attachments
- Contain your full contact details
- Must be submitted in the attached template. An editable version of the document is also available from www.pcopa.com

Please also note that:

- Material already published elsewhere should not form the basis of a submission, but may be referred to within a proposed memorandum, in which case an attachment of the published work should be included.
- Once submitted, evidence is the property of the Commission. The Commission will normally, though not always, choose to make public the written evidence it receives, by publishing it on the internet (where it will be searchable), by printing it or by making it available through the Parliamentary Archives.
- If there is any information you do not want to be published please let us know and we will not publish it.
- Please also note that the Commission may contact you with news, updates and information as appropriate using the email address from which you have submitted evidence.

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Are you responding on behalf of (please tick one)

- ☐ Private individual
- ☐ Private sector organisation
- ■ **Academic institution**
- ☐ Public sector organisation
- ☐ Third sector organisation
- ☐ MP or political organisation
- ☐ Other (please write in) _____

Contact details

Please provide your contact details.

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If responding on behalf of an organisation, please indicate its primary area of work

- ☐ Health and social care
- ☐ Education
- ☐ Sports and physical activity/ leisure and recreation
- ☐ Urban planning and design/ architecture
- ☐ Transport
- ☐ Local/ city/ town council
- ☐ National politics
- ☐ Consultancy - please write in: _____
- ■ **Other – please describe**: Dietary and physical activity academic research

Q1 How can we encourage more people to be physically active, on a regular basis?

We are interested in suggestions across all policy areas, including those not traditionally associated with 'physical activity'.

Incorporating physical activity into travel

1.1 People leading busy lives can find it hard to accommodate more physical activity into their leisure time. Encouraging travel that involves walking and cycling can help people be more active on a regular basis. The average journey to work in Great Britain takes 28 minutes each way. While it may be impractical for those who live far from work to walk or cycle all the way, many commuters could meet recommended activity levels if they walked or cycled for at least part of their journeys.

1.2 Importantly, physical activity achieved through active travel does not appear to be compensated for by lower levels of physical activity at other times. People who commute by public transport, or those who walk or cycle for transport (alone, or in combination with the car), tend to be more physically active overall than those who use only the car. The *iConnect* study of communities in Cardiff, Kenilworth and Southampton has shown that adults whose active travel increased over the course of a year reported about two hours more physical activity per week on average, whereas those whose active travel decreased reported about two hours less. [1]

1.3 If and when people use active travel is complex and influenced by a combination of factors related to the individual, their social relationships, community, wider society and the environment. This is known as the socio-ecological model and is relevant to all considerations of how we encourage more people to be physically active on a regular basis. Strategies that target only a single aspect are unlikely to be successful. This is not an argument against intervention; instead it implies that multiple barriers often need to be removed to achieve substantive change. Furthermore, it is increasingly recognised that much behaviour is automatic, triggered outside of conscious awareness and cued by influences in the social, physical, economic and regulatory environments.[2] This explains why, for instance, simply using information to persuade people to change their health related behaviour has had – at best – modest effects.

1.4 Practice theory is one approach that has been used to go beyond traditional approaches to behaviour change. Activities are considered to be practices which are constituted by 'stuff, skills, and meanings' which people need in order to participate. This implies policy-makers should focus on changing practices, not individual beliefs. For example, in the UK cycling usually means sharing roads with busy or fast motor traffic, unlike in the Netherlands. It has become defined as a practice associated with sporty and confident people (often young men), requiring specialised equipment (helmets, lycra) and high levels of road skills. Because these different aspects of the practice are related, increasing the appeal of cycling is not primarily about marketing. Instead it requires intervening at a range of levels; importantly including infrastructural and legal change to create a more inclusive cycling environment, that opens up a broader range of meanings for cycling. The London cycle hire scheme could be seen as an example of an intervention that has reduced the 'stuff' needed to cycle.[3]

Location, distance and infrastructure

1.6 Perhaps unsurprisingly, home location and therefore distance to destinations frequently limits the travel choices that are available to people. As a result, once people have made choices about where to live and work, their travel choices are usually constrained by those decisions and largely determined by convenience and proximity. This has implications for spatial planning and service provision – for example when building or developing neighbourhoods, making facilities within walkable / cycleable distance and providing high quality public transport is important. The point at which people move home is also a key moment when interventions to change behaviour may be effective. For instance, a consideration of the relative costs of alternative modes of transport is particularly salient for commuters who are reconsidering their travel options after moving home or workplace.[4]

1.7 Although distance may be a barrier to travelling actively for the entire journey, it is not a barrier to incorporating walking and/or cycling as part of their journeys. The *Commuting and Health in Cambridge* study has found that those living further from work are as likely to use some form of active travel in their journey as those living nearer. Commuters who included active travel as part of their car journeys reported an average of 12 minutes of walking or 17 minutes of cycling to and from work per day.[5] Emerging findings also indicate on average 20% of the journey to work for those travelling with by bus, park-and-walk or park-and-cycle, is spent in physical activity of at least moderate intensity. The rise in public transport fares relative to the cost of motoring is, therefore, unlikely to support physical activity.

1.8 Provision and accessibility of car parking may have an important influence on travel behaviour. Review-level evidence suggests that charging for car parking is associated with fewer single-occupant car trips. Research in Cambridge has shown that workplace parking charges are associated with a decreased likelihood of regular car commuting[6], and are particularly strongly associated with an increased likelihood of incorporating walking or cycling into a longer car commuting journey.[5] Research also shows that workplace parking also predicts change in commuter travel over 12 months.[7] Depending on local factors (journey distances, public transport quality and congestion) these findings suggest an intervention strategy could involve charging for on-site workplace car parking while providing free off-site parking within walking or cycling distance.

1.9 Improving physical infrastructure for walking and cycling has been much discussed, and does have a clear potential to encourage physical activity if it reduces barriers to walking or cycling (such as actual and/or perceived danger from motor vehicles); or if it provides more direct, convenient or pleasant routes for pedestrians and cyclists to reach their destinations.[8] However, this approach alone is unlikely to overcome all barriers to physical activity. Access to an environment that supports physical activity is likely to be 'necessary but not sufficient', and many interventions to improve the environment for walking or cycling have been too tentative to have any effect.[9] Nevertheless certain characteristics of the route to work – access to public transport, convenience of cycle routes, and pleasant walking routes – do predict change in commuter travel over 12 months.[7] A recent study of the six *Cycling Demonstration Towns* (funded 2005-2011) and 12 *Cycling City and Towns* (funded 2008-2011) showed that the towns with the biggest increase in cycling to work were those that placed greater emphasis on workplace cycling initiatives.[10]

1.10 Observational data illustrate the potential impact of large scale interventions.[11] However, to date the evidence from controlled studies of interventions to promote cycling suggests a relatively modest impact in practice.[12] Current active travel interventions are often small scale, localised and limited in their scope. Since travel behaviour is complex and likely to be determined by factors such as the distance or cost of journeys as well as individual attributes, preferences and constraints on choices, it appears unlikely that small scale environmental changes alone will result in substantial increases in walking and cycling, particularly in areas with a low walking or cycling mode share at present. For many people; particularly where mode share is low and walking or cycling are not seen as activities for people like them. Infrastructure and cultural norms need to work to change together to have substantive effects. This suggests that sustained and substantial interventions that also target cultural acceptability and allow for gradual transmission of behaviours through social networks are likely to be considerably more effective.

Q2 What fundamental policy changes need to be made to increase the levels of physical activity across the UK? We are interested in suggestions across all policy areas, including those not traditionally associated with 'physical activity'. You may also wish to consider how different populations within the UK can effectively be reached through policy change.

Applying current policy and guidance more fully

2.1 We would draw the Commission's attention to existing policy and guidance that, if more widely and vigorously applied, would encourage physical activity. Policy documents such as the Department of Health's *Healthy lives, healthy people: a call to action on obesity in England* [13] demonstrate awareness of the socio-ecological approach needed to address different aspects of behaviour change. The NICE Guidance *Promoting and creating built or natural environments that encourage and support physical activity*[14] recognises the importance of prioritising the support for walking and cycling in planning and transport, and identifies the types of intervention that ought to be developed and introduced. However, application of this guidance is far from widespread: as noted above, interventions are often local and limited. The Active Travel (Wales) Act 2013 [15], although in early stages of implementation, would appear to be more cognisant of existing recommendations and guidance in this area. The recent All-Party Parliamentary Group's Inquiry *Get Britain Cycling* [16] contains valuable recommendations.

Improving evaluation

2.2 The study of the *Cycling Demonstration Towns and Cycling City and Towns* (see 1.8) found that the initiatives have had a positive effect on the numbers of people cycling and walking to work, while the number of people driving to work decreased. The research also found that the relative increase in cycling to work was greatest among those who lived in the most deprived areas, suggesting a potentially positive effect on health equity. However, the large differences in the level of success between different towns in these initiatives, and lack of information about what specific elements of the programmes were most influential is consistent with the observation that more robust evidence is needed on the most effective interventions, and better linkages are needed between practice and evidence. The fact that more research is needed should not be taken as an excuse for inaction: it is an argument for interventions that appear promising based on existing evidence, theories and new kinds of modelling. These interventions must then be properly evaluated so that best future practice and policy can be more readily identified. Specifically, more robust and more interdisciplinary evaluation and complex system modelling should be included at the design stage of new interventions. Local authorities, with their newly acquired responsibilities for public health, are ideally placed to develop, implement and evaluate policy and practice in this area.

Recognising co-benefits

2.3 Walking and cycling also need to be given suitable recognition within the transport policy realm for the wide co-benefits they can deliver beyond the health improvements and potential cost savings associated with all physical activity. For instance, active travel offers opportunities for meeting air pollution targets and carbon reduction: the iConnect study found that people who walk or cycle more for transport have lower transport carbon emissions overall, while those who report higher levels of recreational physical activity tended to generate higher transport carbon emissions. [17] This may reflect a tendency for people to use motor vehicles to travel to places where they can be active in their leisure time. This consideration is also relevant to the prevailing policy of addressing carbon reduction through the increasing use of low emission vehicles, which addresses neither congestion nor physical activity.

2.5 It is important that transport forecasting captures both existing changes to trends (e.g. falling car use in London and wider predictions of peak car) and the potential for walking and cycling to contribute to future mobility needs. Current projections for longer term declines in cycling present a barrier to implementing policies that could provide for an increase in cycling whilst walking is rarely considered as a transport mode in these projections, despite its vital contribution to most people's transport journeys.

Q3 What existing best practice is being delivered in or across sport, health, transport, urban planning and education which addresses the issue of physical inactivity? How and why are these examples successful? You may wish to consider factors such skills, attitudes to risk and change, rules such as procurement, incentives and the degree of integration with existing or other services. You may also choose to consider initiatives from outside these sectors which have led to an increase in physical activity (as a direct or indirect impact).

Q4 What are some examples of initiatives that have failed and why have they been unsuccessful or not lasted?

Bikeability and Cycle Superhighways

4.1 Two promising interventions that have not achieved the hoped for success are the Bikeability training and the Cycle Superhighways in London. Bikeability had not led to the hoped for increases in cycling to school amongst children; most likely because other barriers have not simultaneously been tackled. The Cycle Superhighways provide an example of the problems of a learning curve with current plans for the next round of Superhighways proposing much higher design standards. Moving more quickly up this curve is important to prevent deaths which are both individual tragedies and discourage cycling. This relates both to the policy and institutional level but also the skills embedded in engineers, planners and other practitioners. In other places problems are related to the short term nature of interventions. Particularly where multiple barriers exist, short term policies are unlikely to be sufficient to achieve substantive and sustained change.

Q5 In a world with limited financial resources what are the most cost-effective approaches and how can existing resources be realigned to have the greatest impact?

5.1 Evidence to answer the comparative question about which specific active travel intervention are the *most* cost-effective is lacking. However, as a general point, efforts that aim to shift the population distribution of physical activity rather than just targeting high risk individuals (as outlined by Geoffrey Rose[18]) are likely to be more cost-effective overall.

5.2 In terms of immediate health and cost gain, focusing on interventions that increase active travel in older people may have been overlooked. Recent modelling has highlighted that short to medium term physical activity benefits are far larger in older people, and that benefits to injury risk ratios improve rapidly with age (even though older people are at higher injury risk).[19,20]

5.3 The *Cycling Demonstration Towns* and *Cycling City and Towns* (see 1.11/2.2) spent between £14 and £17 per person per year, providing funding for a few years similar to the on-going funding in many high-cycling European cities. The relative increase in cycling to work was also of similar scale to the increase seen in response to similar per-capita investment in other European settings. The current English average spend on cycling is around £1 per person. The All Party Parliamentary Cycling Group's recent *Get Britain Cycling* report, recommended that UK cycle budgets be increased to £10 per person per year, rising to £20. When considering the comparatively high cost of investment in road infrastructure for motor vehicles, this level of investment could well prove to be cost-saving when co-benefits of active travel are considered. From a household budget point of view, active travel also brings the potential benefit of alleviating transport poverty and cost of living pressures.

Q6 How can young people be encouraged to take part in more physical activity? We are interested in ideas and examples which cover before, during and after school, as well as time in weekends and holidays.

6.1 Active travel has an important role in the physical activity of children, and many of the general points outlined above are relevant to increasing children's physical activity through travel. For a full response on Question 6, please see *All Party Physical Activity Commission – CEDAR/MRC Epidemiology Unit submission 1: Adult and childhood physical activity*

Q6[2] If there are any relevant **papers** that have been generated by, or useful to your organisation in adopting innovations, please attach them as part of your response, or give links in the box below

All references are Open Access, and accessible at the links below. (Or where not Open Access, attached with the submission – as indicated)

1. Sahlqvist S et al. Int J Behav Nutr Phys Act. 2013. *Change in active travel and changes in recreational and total physical activity in adults: longitudinal findings from the iConnect study.* www.ncbi.nlm.nih.gov/pmc/articles/PMC3598920/
2. Marteau TM et al; BMJ 2011. *Judging nudging: can nudging improve population health?* www.bmj.com/content/342/bmj.d228. [Not Open Access - attached with submission]
3. Goodman, A., Green, J., and Woodcock, J., *The role of bicycle sharing systems in normalising the image of cycling: an observational study of London cyclists.* Journal of Transport and Health, Accepted for Publication.
4. Jones C, Ogilvie D; IJBNPA 2012. *Motivations for active commuting: a qualitative investigation of the period of home or work relocation.* http://www.ijbnpa.org/content/9/1/109
5. Panter J et al; Prev Med 2013. *Incorporating walking or cycling into car journeys to and from work: the role of individual, workplace and environmental characteristics* www.ncbi.nlm.nih.gov/pmc/articles/PMC3712186/
6. Goodman A et al; Soc Sci Med 2012. *Healthy travel and the socio-economic structure of car commuting in Cambridge, UK: a mixed-methods analysis* http://dx.doi.org/10.1016/j.socscimed.2012.01.042
7. Panter J et al; Prev Med 2012. *Patterns and predictors of changes in active commuting over 12 months* www.ncbi.nlm.nih.gov/pmc/articles/PMC3842498/
8. Macmillan, A. and Woodcock, J., *Understanding Trends in Cycling in London: System Structure and Behaviour using System Dynamics Modelling*, 2013: London.
9. Giles-Corti B, Donovan RJ; Am J Public Health 2003. *The relative influence of individual, social and physical environment determinants of physical activity.* www.ncbi.nlm.nih.gov/pmc/articles/PMC1448014/
10. Goodman A et al; Soc Sci Med 2013. *Effectiveness and equity impacts of town-wide cycling initiatives in England: A longitudinal, controlled natural experimental study* www.sciencedirect.com/science/article/pii/S0277953613004826
11. Pucher J et al; Prev Med 2010. *Infrastructure, programs, and policies to increase bicycling: an international review.* www.ncbi.nlm.nih.gov/pubmed/19765610 [Not Open Access - attached with submission]
12. Yang et al; BMJ 2010. *Interventions to promote cycling: systematic review.* www.ncbi.nlm.nih.gov/pmc/articles/PMC2957539/
13. *Healthy lives, healthy people: a call to action on obesity in England. London: Department of Health, 2011*. www.gov.uk/government/publications/healthy-lives-healthy-people-a-call-to-action-on-obesity-in-england
14. NICE guidance *Promoting and creating built or natural environments that encourage and support physical activity.* www.nice.org.uk/ph008 CEDAR's submission to this guidance can be found at: www.nice.org.uk/guidance/index.jsp?action=download&o=58977
15. The Active Travel (Wales) Act 2013 wales.gov.uk/topics/transport/integrated/walkingcycling/activetravelact/?lang=en
16. *Get Britain Cycling: Summary and Recommendations, 2013* http://allpartycycling.files.wordpress.com/2013/04/get-britain-cycling1.pdf
17. Goodman A et al; Environ Health 2012. *Associations of health, physical activity and weight status with motorised travel and transport carbon dioxide emissions: a cross-sectional, observational study* www.ncbi.nlm.nih.gov/pmc/articles/PMC3536622/
18. Int J Epidemiol 2009. *Rose's Strategy of Preventive Medicine.* Geoffrey Rose with commentary by Kay-Tee Khaw and Michael Marmot. http://ije.oxfordjournals.org/content/38/6/1743.full
19. Woodcock, J., Givoni, M., and Morgan, A.S., PLoS One, 2013. Health Impact Modelling of Active Travel Visions for England and Wales Using an Integrated Transport and Health Impact Modelling Tool (ITHIM). www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0051462
20. Woodcock, J., Tainio, M., et al., BMJ 2014 Health effects of the London bicycle sharing system: health impact modelling study http://www.bmj.com/content/348/bmj.g425

Q7 Any further comments?