



To: Neighbourhoods and City Development

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Subject: Essential Evidence on a page: No 102 Health benefits of mass recreational programmes

Top line: Calculations as to the economic effectiveness of mass recreational programmes in four cities suggests that the public health outcomes are beneficial due to an increase in the number of people physically active.

Over the last decade, the global public health focus has shifted toward the increasing burden of chronic diseases including those related to insufficient physical activity. Mass participation in recreational events has been trialed as one means to engage more people in physical activity with the possibility of habitualising use.¹ The Ciclovía recreativa is a multi-sectorial, community-based mass programme in which streets are temporarily closed to motorised transport (mostly on Sundays) allowing exclusive access to individuals for leisure activities and physical activity.² The Ciclovía contributes to social capital development, improvement in quality of life by encouraging the use of public space for recreation, and chronic disease prevention through physical activity promotion.

Since the first Ciclovías began in the 1960s, the initiative has gradually spread across America with the greatest growth taking place after 2000. In the UK, variants have sprung up but on a far smaller scale, which includes Playing Out in Bristol supporting communities to establish regular sessions for children to play on their local streets using formal street closures (opening up streets for other road uses).³ A study of four Ciclovía programmes assessed benefits to adults participating weekly in Bogota and Medellín (Columbia), Guadalajara (Mexico) and San Francisco (US) through an economic assessment.⁴ The researchers calculated the cost-benefit ratio for programmes by dividing the total direct health benefit derived from each Ciclovía programme by the total costs of each. The number of pedestrians and cycle users for each event ranged from 1.4 million (Bogata) to 25,000 (San Francisco). Data on users was estimated through surveys conducted in each of the programmes between 2005-2010 and allowed for the fact that some attendees would otherwise be physically active even if there were no Ciclovía events (12% in Bogata). According to the surveys between 34% and 63% of users in the four cities were considered physical activity users.

The annual cost per capita of the programmes was: US \$6.0 for Bogotá, US \$23.4 for Medellín, US \$6.5 for Guadalajara, and US \$70.5 for San Francisco. The cost-benefit ratio for health benefit from physical activity was 3.23 – 4.26 for Bogotá, 1.83 for Medellín, 1.02 – 1.23 for Guadalajara, and 2.32 for San Francisco. The WHO Health Economic Assessment Tool (HEAT) was applied to appraise cycling. The HEAT showed substantial savings in reduced mortality can be expected from these programmes. The researchers concluded that from a public health perspective for promoting physical activity, these Ciclovía programmes are cost beneficial. Wider impacts on health and wellbeing through less pollution, less traffic severance and changes in economic activity were not assessed but which would likely increase the cost effectiveness of Ciclovía programmes.

¹ See <http://www.travelwest.info/evidence> No 23

² Sarmiento, O, Torres, A, Jacoby, E, et al. 2010 The Ciclovía-recreativa: a mass recreational program with public health potential. *Journal of Physical Activity and Health*, 7(suppl 2): S163-S180.

³ See <http://playingout.net/> accessed 5th April 2013.

⁴ Montes, F. et al 2011 Do health benefits outweigh the costs of mass recreational programs? An economic analysis of four Ciclovía programs. *Journal of Urban Health*, 89(1): 153-170.