



THE UNIVERSITY OF
WESTERN AUSTRALIA
Achieving International Excellence

Centre for the Built Environment and Health

June 29, 2011

Centre for the Built Environment and Health
The University of Western Australia
M707, 35 Stirling Highway
CRAWLEY WA 6009

T 6488 1257
F 6488 1199
E billie.giles-corti@uwa.edu.au

CRICOS Provider Code: 00126G

Courier address: 10 Stirling Highway, Nedlands

The Secretary
Legislative Council Environment and Planning Commission
Parliament House
Spring Street
MELBOURNE. VIC. 3002

keir.delaney@parliament.vic.gov.au

Dear Sir

Thank you for the invitation to make a submission to the Built Environment and Public Health Inquiry. I make the submission as the outgoing Director of the UWA Centre of the Built Environment and Health (and soon to be the Director of the McCaughey Centre, VicHealth Centre for the Promotion of Mental Health and Community Wellbeing).

In terms of the Inquiry's terms of reference, I provide the following contributions:

1. Review of the evidence of the contribution of the natural and built environment on the promotion of health and well being

There is now a growing body of evidence of the impact of the built environment and a range of health outcomes including walking, cycling and public transport use which has been summarized into high-level literature reviews (e.g., see recent international reports by the US Transportation Research Board Report, National Institute of Clinical Excellence and Foresight reportⁱ) combined with evidence-based policy position statements and publications by the Australian Heart Foundation.ⁱⁱ

Locally, the Centre for the Built Environment and Health has contributed a substantial number of papers and book chapters either reviewing the evidence; or empirical evidence (see list attached).

In summary, the evidence suggests that:

- pedestrian-friendly walkable environments (mixed use developments with higher density and connected street networks) with access to destinations, not only encourage more walking and cycling, but also public transport. Our Centre's local research,ⁱⁱⁱ shows that those who use public transport do more total physical activity (even adjusting for leisure-time physical activity).
- The take-up of cycling is associated with living in higher density environments and access to more destinations. Countries with a higher proportion of trips by walking, cycling and public transport, have lower levels of obesity.^{iv} Moreover, there is evidence that it is possible to significantly increase cycling, by investment in comprehensive cycling infrastructure (i.e., increased cycling infrastructure including off-road and separated, on-road cycle paths, cycle parking facilities etc).^v

- Obesity is consistently shown to be associated with living in urban sprawl and low walkable communities.^{vi} This appears to be due to three key factors: decreased walking, increased vehicle miles travelled,^{vii} and increased sedentary behavior (particularly for women).^{viii}
- Our research has shown that access to larger (i.e., over 2 acres), high quality public open space in suburban neighbourhoods, is associated with increased walking for recreation.^{ix} Public open space is also shown to be associated with enhanced mental health,^x independent of walking. Although as yet unpublished, research by PhD student Jacinta Francis,^{xi} has shown that the impacts on positive mental health of access to public open space, is more to do with its quality rather than its size.
- Children's walking and cycling is consistently shown to be associated with the design of neighbourhoods.^{xii} Exposure to traffic decreased children's physical activity, particularly if they need to cross busy roads. Results from our group's TREK study, has found that children attending schools in neighbourhoods with connected street networks (which increases proximity to destinations), but higher levels of traffic, decreases the likelihood of children walking to school.^{xiii} Subsequent studies (currently under review) shows that the mechanism through which the built environment affects whether or not children walk or cycle, or are independently mobile, is through its impact on parent's confidence in their children's ability to walk or cycle locally. Parents of children living in more walkable neighbourhoods are more confident in their child's abilities, which in turn influences whether or not they walk, cycle or are independently mobile. These findings have important implications for the urban design of neighbourhoods in which schools are sited.
- Our group has recently completing a review of the evidence for the Heart Foundation on the impact of higher density housing on health. This report has not yet been released: however it suggests that three factors will influence the success of higher density housing: the building and its design, governance and maintenance; the social and cultural environment (i.e., the type of people living in the higher density housing); and the built environment (i.e., the location of the higher density housing; and the amenity in the local neighbourhood). This report has important implications as Australia moves towards increasing population density. In short, there appears to be a threshold: insufficient density is detrimental to health; however, too much density and insufficient attention to building design, the residents, governance and maintenance, its location and the amenity of the local neighbourhood (including public transport, access to public open space, and access to shops and services and recreational opportunities), may also be detrimental to health.

2. Identify and report on elements of environment planning and design which provide the most promising opportunities for improving health outcomes in Victoria

The Victorian could potentially look to the West for its experience in using policy to influence urban planning practice. The state government's Liveable neighbourhood guidelines aim to increase walking, cycling and public transport and create a sense of community. The trial of these guidelines commenced in 1998. Our group has been evaluating these guidelines. The results suggest that although the policy principles are appropriate and supported by evidence, the implementation of the policy appears to be insufficient to change behavior. This suggests that to change behavior and increase walking, cycling and public transport use; some elements of the built environment urban policy need to be mandated. For example, without sufficient population or housing density, there is insufficient population to make public transport and shops viable. This suggests that it is critical to mandate for some environmental attributes (e.g., population density particularly around shops and services and public transport; access to green space etc). Moreover,

more specific guidelines related to creating pedestrian friendly environments for children, is essential in terms of the siting of schools.

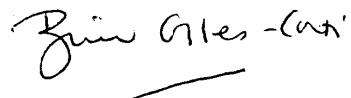
Public open space

Given the importance of public open space, as efforts are made to increase population density, there may need to be more public open space than was required in neighbourhoods with large housing blocks and back-yards. The exact amount of POS required may need further consideration taking into account issues of biodiversity, and well as population needs. However, in addition to the quantity of public open space, greater consideration needs to be given to the quality of public opens space. People do not use poorly design public open space, but they do use well designed public open space. Victorian research has shown little inequity in terms of the distribution of public open space, the quality of that space differs significantly, with those in disadvantaged areas having less access to higher quality public opens space.^{xiv} There is some evidence that if the quality of local neighbourhoods could be enhanced, some of the socioeconomic differences observed between residents of lower SES groups (e.g., decreased walking), might be reduced.^{xv} This highlights the importance of greater consideration being given to the quality and quantity of public open space in neighbourhoods.

I am currently in transit from Perth to Melbourne, hence the brevity of this submission. However, if it would be useful I would be delighted to contribute further, including making a oral presentation to the Committee. From July 4th, I will be the Director of the McCaughey, VicHealth Centre for the Promotion of Mental Health and Community Wellbeing at the University of Melbourne.

Thank you for the opportunity to contribute.

Yours sincerely,

A handwritten signature in black ink that reads "Billie Giles-Corti". The signature is written in a cursive, flowing style. Below the signature is a horizontal line.

Billie Giles-Corti (Professor and Centre Director)

-
- ⁱ Transportation Research Board. Does the built environment influence physical activity? Examining the evidence. Washington, DC: TRB, 2005; National Institute for Health and Clinical Excellence. Promoting or creating built or natural environments that encourage and support physical activity: NICE, 2008; Butland B, Jebb S, Kopelman P, McPherson K, Thomas S, Mardell J, et al. Foresight. Tackling obesity: Future Choices - Project Report. London: Government Office for Science, 2007:161..
- ⁱⁱ Gebel K, Bauman A, Owen N, Foster S, Giles-Corti B, on behalf of the National Physical Activity Advisory Committee. Position Statement: The Built Environment and Walking Canberra: NHFA, 2008 and . Planning Institute of Australia, Heart Foundation. Healthy spaces and places. Towards a national planning guide. Melbourne: PIA, <http://www.planning.org.au/index.php?option=content&task=view&id=668>, 200
- ⁱⁱ Villanueva K, Giles-Corti B, McCormack G. Achieving 10,000 steps: a comparison of public transport users and drivers in a university setting. *Prev Med* 2008;47(3):338-41.
- ^{iv} Bassett DRJ, Pucher J, Buehler R, Thompson DL, Crouter SE. Walking, cycling, and obesity rates in Europe, North America, and Australia. *Journal of Physical Activity & Health* 2008;5(6):795-814.
- ^v Pucher J, Dill J, Handy S. Infrastructure, programs, and policies to increase bicycling: an international review. *Prev Med* 2010;50 Suppl 1:S106-25
- ^{vi} Robertson-Wilson J, Giles-Corti B. Walkability, Neighbourhood Design, and Obesity. In: Townsend T, Albanides S, Lake A, editors. *Obesogenic environments: Complexities, perceptions and objective measures*. UK: Wiley-Blackwell., 2010
- ^{vii} Frank LD, Andresen MA, Schmid TL. Obesity relationships with community design, physical activity, and time spent in cars. *American Journal of Preventive Medicine* 2004;27(2):87-96
- ^{viii} Sugiyama T, Healy GN, Dunstan DW, Salmon J, Owen N. Is television viewing time a marker of a broader pattern of sedentary behavior? *Ann Behav Med* 2008;35(2):245-50
- ^{ix} Sugiyama T, Francis J, Middleton N, Owen N, Giles-Corti B. Associations of attractiveness, size and proximity of multiple neighborhood open spaces with recreational walking. *Am J Public Health* 2010
- ^x Sugiyama T, Leslie E, Giles-Corti B, Owen N. Associations of neighbourhood greenness with physical and mental health: do walking, social coherence and local social interaction explain the relationships? *J Epidemiol Community Health* 2008;62(5):e9.
- ^{xi} Francis J. Associations between public space and mental health in new residential developments. The University of Western Australia, 2010
- ^{xii} Giles-Corti B, Kelty SF, Zubrick SR, Villanueva KP. Encouraging walking for transport and physical activity in children and adolescents: How important is the built environment? *Sports Med* 2009;39(12):995-1009.
- ^{xiii} Giles-Corti B, Wood G, Pikora T, Learnihan V, Bulsara M, Van Niel K, et al. School site and the potential to walk to school: The impact of street connectivity and traffic exposure in school neighborhoods. *Health Place* 2011;17(2):545-50.
- ^{xiv} Crawford D, Timperio A, Giles-Corti B, Ball K, Hume C, Roberts R, et al. Do features of public open spaces vary according to neighbourhood socio-economic status? *Health Place* 2008;14(4):889-93.
- ^{xv} Giles-Corti B, Donovan R. Socioeconomic status differences in recreational physical activity levels and real and perceived access to a supportive environment. *Preventive Medicine* 2002;35:601-11

BOOK CHAPTERS

1. Straton J, Giles-Corti, B. (2003). How the west was won: abortion law reform in Western Australia. In Weeks W, Hoatson L, Dixon J (Eds), *Community practice in Australia*. Pearson Education Australia. ISBN 1-74091-033-8.
2. Falconer R, Giles-Corti B. (2008). Smart Development: designing the built environment for improved access and health outcomes. In Newman P (Ed), *Transitions: pathways towards sustainable urban development in Australia*. CSIRO, Victoria. ISBN 978 1 4020 8812 4.
3. Kelty S, Giles-Corti B, Zubrick, S. (2008). Physical Activity and young people: The impact of the built environment in encouraging play, fun and being active. In Beaulieu NP (Ed), *Physical Activity in Children. New Research*. Nova Science Publishers: Hauppauge NY. ISBN: 978-1-60456-306-1.
4. Robertson-Wilson J, Giles-Corti B. (2010), Walkability, Neighbourhood Design, and Obesity. In Townsend T, Lake A (Eds), *Obesogenic Environments: complexities, perceptions and objective measures*. Wiley-Blackwell: UK.
5. Giles-Corti B, Robertson-Wilson J, Wood L, Falconer R. 2010. The Role of the Changing Built Environment in Shaping Our Shape. In Pearce J, Witten K (Eds), *Geographies of Obesity: environmental understandings of the obesity epidemic*. Ashgate Publication.
6. Bull FC, Giles-Corti B, Wood L. (2010). Active Landscapes: An Active Nation – the methodological challenges in developing the evidence on urban environments and physical activity. In Ward-Thompson C, Bell S, Aspinall P, editors. *Innovative Research in Landscape and Health*. Routeledge.

PEER REVIEWED JOURNAL ARTICLES

1. McCormack G, Giles-Corti B, Timperio A, Wood G, Villanueva K. A cross-sectional study of the individual, social, and built environmental correlates of pedometer-determined physical activity among elementary school children. *International Journal of Behavioural Nutrition and Physical Activity* [in press, accepted for publication February 18 2011].
2. Giles-Corti B, Wood G, Pikora T, Learnihan V, Bulsara M, Van Niel K, Timperio A, McCormack G, Villanueva K. School site and the potential to walk to School: The impact of street connectivity and traffic exposure in school neighbourhoods. *Health Place* 2011;17:545-550.
3. Veitch J, Crawford D, Giles-Corti B, Timperio A, Salmon J, Abbott G. Is the neighborhood environment associated with sedentary behavior outside of school hours among children? *Annals of Behavioral Medicine*. [In press, accepted for publication 17 December 2010].
4. Van Dyck D, Cardon G, Deforche B, Giles-Corti B, Sallis JF, Owen N, et al. Environmental and psychosocial correlates of accelerometer-assessed and self-reported physical activity in Belgian adults. *Int J Behav Med*. [In press, accepted for publication 17 October 2010].
5. Giles-Corti B, Foster S, Shilton T, Falconer R. The co-benefits for health of investing in active transportation. *NSW Public Health Bulletin*. 2010;21(5-6):122-27.

-
6. Foster S, Giles-Corti B, Knuiman M. Neighbourhood design and fear of crime: A social-ecological examination of the correlates of residents' fear in new suburban housing developments. *Health Place* 2010;16(6): 1156-1165
 7. Crawford D, Cleland V, Timperio A, Salmon J, Andrianopoulos N, Roberts R, Giles-Corti B, Baur L, Ball K. The longitudinal influence of home and neighbourhood environments on children's body mass index and physical activity over 5 years: the CLAN study. *Int J Obesity* 2010;34(7):1177-87. (C=1).
 8. Ball K, Cleland V, Timperio A, Salmon J, Giles-Corti B, Crawford D. Love thy neighbour? Associations of social capital and crime with physical activity. *Soc Sci Med* 2010: doi: 10.1016/j.socscimed.2010.04.041. (C=0).
 9. Turrell G, Haynes M, Burton NW, Giles-Corti B, Oldenburg B, Wilson LA, et al. Neighborhood Disadvantage and Physical Activity: Baseline Results from the HABITAT Multilevel Longitudinal Study. *Ann Epidemiol* 2010 Mar;20(3):171-81. (C=0).
 10. Saarloos D, Alfonso H, Giles-Corti B, Middleton N, Almeida O. The built environment and depression in later life: the Health in Men Study. *Am J Geriatr Psychiatry*. [In press, accepted for publication 22 April 2010].
 11. McCormack GR, Rutherford WJ, Giles-Corti B, Tudor-Locke C, Bull F. BMI-referenced cut-points for recommended daily pedometer-determined steps in Australian school-aged children and adolescents. *Res Q Exer Sport*. [In press, accepted for publication 7 April 2010].
 12. Foster S, Giles-Corti B, Knuiman M. Creating safe walkable streetscapes: Does house design and upkeep discourage incivilities in suburban neighbourhoods? *J Environ Psychol*. [In press, accepted for publication 29 March 2010].
 13. Titze S, Giles-Corti B, Knuiman M, Pikora T, Timperio A, Bull F, et al. Associations between intrapersonal and neighbourhood environmental characteristics and cycling for transport and recreation in adults: baseline results from the RESIDE study. *JPAH* 2010;7(4):423-31. (C=0).
 14. O'Donovan G, Blazeovich AJ, Boreham C, Cooper AR, Crank H, Ekelund U, Fox KR, Gately P, Giles-Corti B, Gill JMR, Hamer M, McDermott I, Murphy M, Mutrie N, Reilly JJ, Saxton JM, Stamatakis ET. The ABC of Physical Activity for Health: a Consensus Statement from the British Association of Sport and Exercise Sciences. *J Sports Sci* 2010 Apr;28(6):573-91. (C=6).
 15. Falconer R, Giles-Corti B, Newman P. Is practice aligned with the principles? Implementing New Urbanism in Perth, Western Australia Transport Policy. *Trans Policy* 2010;17(5):287-94. (C=0).
 16. Timperio A, Jeffery R, Crawford D, Roberts R, Giles-Corti B, Ball K. Neighbourhood physical activity environments and adiposity in children and mothers: a three-year longitudinal study. *Int J Behav Nutr Phys Act* 2010;7:18. (C=0).
 17. Wilson LM, Giles-Corti B, Burton NW, Giskes K, Haynes M, Turrell G. The Association Between Objectively Measured Neighborhood Features and Walking in Mid-Aged Adults. *Am J Health Prom*. [In press accepted for publication 22 January, 2010].
 18. Wood L, Frank LD, Giles-Corti B. Sense of Community and its relationship with walking and neighborhood design. *Soc Sci Med* 2010;70:1381-90. (C=0).
 19. Christian (nee Cutt) H, Giles-Corti B, Knuiman M. "I'm just a'-walking the dog" Correlates of regular dog walking. *Fam Comm Health* 2010 Jan-Mar;33(1):44-52. IF=1.100. (C=0).

-
20. Sugiyama T, Francis J, Middleton N, Owen N, Giles-Corti B. Associations between recreational walking and attractiveness, size, and proximity of multiple neighborhood open spaces. *Am J Public Health* 2010;100(9):1752-59 (C=1).
 21. Giles-Corti B, Kelty S, Zubrick S, Villaneuva K. (Invited review) Encouraging walking for transport and physical activity in children and adolescents: How important is the built environment? *Sports Med* 2009; 39(12):993-1009. IF= 3.619. (C=1).
 22. Giles-Corti B, King AC. (Invited review) Creating active environments across the life course: "thinking outside the square". *Br J Sport Med* 2009;43(2):109-113. IF=2.126 (C=5).
 23. McCormack RM, Friedenreich C, Shiell A, Giles-Corti B, Doyle-Baker PK Gender and age-specific seasonal variations in physical activity among adults. *J Epidemiol Community Health* 2009 Oct 19. IF=3.186
 24. Sugiyama T, Leslie E, Giles-Corti B, Owen N. Physical activity for recreation or exercise on neighbourhood streets: Associations with perceived environmental attributes. *Health Place* 2009;15:1058-63. IF=2.818 (C=2).
 25. McCormack G, Shiell A, Doyle-Baker PK, Friedenreich C, Sandalack B, Giles-Corti B. Testing the Reliability of Neighborhood-Specific Measures of Physical Activity Among Canadian Adults. *J Phys Act Health* 2009;6:367-73. (C=1).
 26. Arbel J, Wood L, Howat P, Giles-Corti B, 'The Class is Always Cheaper on the Other Side': Socioeconomic discrepancies in the cost of using recreational facilities. *Ann Leis Res* 2009;2(1):83-87.
 27. Story M, Giles-Corti B, Yaroch AI, Cumins S, Frank LD, Huang TT-K, Lewis LVB. Work Group IV: Future Directions for Measures of the Food and Physical Activity Environments. *Am J Prev Med* 2009;36(4):S182-S188. IF= 3.766 (C=5).
 28. Hume C, Timperio A, Salmon J, Carver A, Giles-Corti B, Crawford D. Walking and Cycling to School Predictors of Increases Among Children and Adolescents. *Am J Prev Med* 2009;36(3):195-200. IF= 3.766 (C=7).
 29. Schilling JM, Giles-Corti B, Sallis JF. Connecting Active Living Research and Public Policy: Transdisciplinary Research and Policy Interventions to Increase Physical Activity. *J Public Health Pol* 2009;30:S1-S15. IF=1.220 (C=4).
 30. Burton NW, Haynes M, Wilson LW, Giles-Corti B, Oldenburg BF, Brown WJ, Giskes K, and Turrell G. HABITAT: A longitudinal multilevel study of physical activity change in mid-aged adults. *BMC Public Health* 2009;9:76. doi 10.1186/1471-2458-9-76. IF=2.029 (C=3).
 31. Giles-Corti B, Knuiaman M, Timperio A, Van Niel K, Pikora TJ, Bull FCL, Shilton T, Bulsara M. Evaluation of the implementation of a government community design policy aimed at increasing local walking: Design issues and baseline results from RESIDE. *Prev Med* 2008;46:46-54. IF= 2.757 (C=19).
 32. Timperio A, Giles-Corti B, Crawford, Andrianopoulos N, Ball K, Salmon J, Hume C. Features of public open spaces and physical activity among children: Findings from the CLAN study. *Prev Med* 2008; 47:514-518. IF=2.757 (C=5).
 33. Crawford D, Timperio AF, Salmon JA, Baur L, Giles-Corti B, Roberts RJ, Jackson ML, Adrianopoolous N, Ball K. Neighbourhood fast food outlets and obesity in children and adults: the CLAN study. *Int J Pediatr Obes* 2008;3(4):249-56. IF=3.984 (C=7).
 34. Cutt H, Giles-Corti B, Knuiaman M. Encouraging physical activity through dog walking: Why don't some owners walk with their dog? *Prev Med* 2008;46(2):120-26. IF=2.757 (C=6).

-
35. Cutt H, Giles-Corti B, Knuiman M, Pikora TJ. Physical activity behaviour of dog owners: Development and reliability of the Dogs and Physical Activity (DAPA) tool. *J Phys Act Health* 2008;5(Suppl 1):S73-S89. (C=3).
 36. Cutt H, Knuiman M, Giles-Corti B. Does getting a dog increase recreational walking? *Int J Beh Nut Phys Act* 2008;4(17):doi: 10.1186/1479-5868-5-17. (C=6).
 37. Foster S, Giles-Corti B. [The built environment, neighborhood crime and constrained physical activity: An exploration of inconsistent findings](#) *Prev Med* 2008;47(3):241-251. IF=2.757 (C=13).
 38. Villaneuva K, Giles-Corti B, McCormack G. [Achieving 10,000 steps: A comparison of public transport users and drivers in a University setting](#) *Prev Med* 2008; 47(3):338-341. IF=2.757 (C=7).
 39. Cutt H, Giles-Corti B, Wood L, Knuiman M, Burke V. Barriers and motivators for owners walking their dog: results from qualitative research', *Health Promot J Aust*, 2008;19(2): 8-44. (C=2).
 40. Tudor-Locke C, Bassett DR, Rutherford WJ, Ainsworth BE, Chan CB, Croteau K, Giles-Corti B, Le Masurier G, Moreau K, Mrozek J, Oppert J-M, Raustorp A, Strath SJ, Thompson D, Whitt-Glover MC, Wilde B, Wojcik JR. BMI-referenced cut-points for pedometer-determined steps/day in adults. *J Phys Act Health* 2008;5(Suppl 1):s126-139. (C=11).
 41. Sugiyami T, Leslie E, Giles-Corti B, Owen, N. Associations of neighbourhood greenness with physical and mental health: Do walking, social coherence and local social interaction explain the relationships? *J Epidemiol Community Health* 2008;62(5):e9. IF= 2.956 (C=21).
 42. Chin GK, Van Niel KP, Giles-Corti B, Knuiman M. Accessibility and connectivity in physical activity studies: The impact of missing pedestrian data. *Prev Med* 2008;46:41-45. IF=2.314 (C=13).
 43. Tudor-Locke C, Giles-Corti B, Knuiman M, McCormack G. Tracking of pedometer-determined physical activity in adults who relocate: results from RESIDE. *Int J Behav Nutr Phys Act* 2008;5:39-46. IF=1.73 (C=6).
 44. Crawford D, Timperio A, Giles-Corti B, Ball K, Hume C, Roberts R, Andrianopoulos N, Salmon J. Do features of public open spaces vary according to neighbourhood socio-economic status? *Health Place* 2008;14(4):889-93. IF=2.367 (C=10).
 45. McCormack GR, Giles-Corti B, Bulsara M. The relationship between destination proximity, destination mix and physical activity behaviors. *Prev Med* 2008;46:33-40. IF=2.757(C=34).
 46. Wood L, Shannon T, Bulsara M, Pikora T, McCormack G, Giles-Corti B. The anatomy of the safe and social suburb: An exploratory study of the built environment, social capital and residents' perception of safety. *Health Place* 2008;14(1):15-31. IF=2.818 (C=14).
 47. Cutt H, Giles-Corti B, Knuiman M, Timperio A, Bull F. Understanding dog owners' increased levels of physical activity: results from the RESIDE study. *Am J Public Health* 2008;98(1):66-69. IF=4.241(C=13).
 48. Giles-Corti B, Knuiman M, Pikora TJ, Van Neil K, Timperio A, Bull FCL, Shilton T, Bulsara M. Can the the impact on health of a government policy designed to create more liveable neighbourhoods: The RESIDential Environments Project. *NSW Public Health Bulletin* 2007;18:11-12 (Special Issue on the built environment and health following Fenner Conference). (C=2).

-
49. Giles-Corti B, Salmon J. (Invited Editorial) Encouraging children and adolescents to be more active. *Brit Med J* 2007; 335:677-678. IF= 9.723 (C=4).
 50. Giles-Corti, B. The impact of urban form on public health, *Public Health Bulletin South Australia* 2007; 4(3): 8-10.
 51. Wood L, Giles-Corti B. Is there a place for social capital in the psychology of health and place? *J Environ Psychol* 2007;28(2):154-163. IF=1.172 (C=3).
 52. Falconer R, Giles-Corti B, Lyons T. Exhausting the City: Implications of land use and transport in Perth, Australia. *World Trans Policy Pract* 2007;13(2):78-105.
 53. McCormack G, Giles-Corti B, Bulsara, M. Correlates of using neighborhood recreational destinations in physically active respondents. *J Phys Activ Health* 2007;4(1):39-53. (C=1).
 54. Wood L, Giles-Corti B, Bulsara M, Bosch D. More than a furry companion: the ripple effect of pets on neighbourhood interactions and sense of community. *Soc Anim* 2007;15(1):43-56. IF=0.294 (C=6).
 55. Cutt H, Giles-Corti B, Knuiman M, Burke V. Dog ownership, health and physical activity: A critical review of the literature. *Health Place* 2007;13(1):261-72. **Most downloaded article in Elsevier group of journals (April - June 2006 - advice from editor)**. IF=2.367 (C=32).
 56. Milne E, Simpson J, Johnston R, Giles-Corti B, English D. Time spent outdoors at midday and children's BMI. *Am J Public Health* 2007;97(2):306-10. IF=3.612 (C=1).
 57. Ball K, Timperio A, Salmon J, Giles-Corti B, Roberts R, Crawford D. Personal, social and environmental determinants of socioeconomic inequalities in walking: A multilevel study. *J Epidemiol Community Health* 2007;61:108-114. IF=2.956 (C=42).
 58. Giles-Corti B, Timperio A, Cutt H, Pikora TJ, Bull FL, Knuiman M, Bulsara M, Van Niel K, Shilton T. Development of a reliable measure of walking within and outside the local neighborhood: RESIDE's Neighbourhood Physical Activity Questionnaire. *Prev Med* 2006;42(6):455-99. IF=2.390 (C=31).
 59. Giles-Corti B. People or places: what should be the target? *J Sci Med Sport* 2006;9(5):357-66. IF=1.212 (C=21).
 60. Timperio A, Ball K, Salmon J, Roberts R, Giles-Corti B, Simmons D, Baur LA, Crawford D. Personal, family, social, and environmental correlates of active commuting to school. *Am J Prev Med* 2006;30(1):45-51. IF=3.497(C=106).
 61. Milne E, Jacoby P, Giles-Corti B, Cross D, Johnston R, English DR. The impact of the Kidskin sun-protection intervention on summer suntan and reported sun exposure: was it sustained? *Prev Med* 2006;42(1):14-20. IF=2.390 (C=8).
 62. Ball K, Salmon J, Giles-Corti B, Crawford D. How can socio-economic differences in physical activity among women be explained? A qualitative study. *Women Health* 2006;43(1):93-113. IF=0.815 (C=18).
 63. Gomm M, Lincoln P, Pikora T, Giles-Corti B. Planning and implementing a community-based public health advocacy campaign: A transportation case study. *Health Promot Int* 2006;21(4):289-92. IF=1.159 (C=1). **Second most downloaded article in Health Promotion International in February 2007 and third most downloaded article in March.**
 64. McCormack G, Masse L, Bulsara M, Giles-Corti B. Constructing indices representing supportiveness of the physical environment for walking using the Rasch measurement model. *Int J Behav Nutr Phys Act* 2006;3(44):1-36. IF=1.73 (C=4).

-
65. Shannon T, Giles-Corti B, Pikora T, Bulsara M, Shilton T, Bull F. Active commuting in a university setting: Assessing commuting habits and potential for modal change. *Trans Policy* 2006;13(3):240-53. IF=1.122 (C=20).
 66. Pikora TJ, Giles-Corti B, Knuiman MW, Bull FC, Jamrozik K, Donovan RJ. Neighbourhood environmental factors correlated with walking near home: using SPACES. *Med Sci Sport Exerc* 2006;38(4):708-14. IF=2.909 (C=46).
 67. McCormack G, Giles-Corti B, Bulsara M, Pikora T. Correlates of distances travelled to use recreational facilities for physical activity behaviors. *Int J Behav Nutr Phys Act* 2006;3(18). IF=1.73 (C=10).
 68. McCormack G, Giles-Corti B, Milligan R. Demographic and individual correlates of achieving 10,000 steps/day: Use of pedometers in a population-based study. *Health Promot J Austr* 2006;17(1):43-7. (C=14).
 69. Giles-Corti B, Broomhall MH, Knuiman M, Collins C, Douglas K, Ng K, Lange A, Donovan RJ. Increasing walking: How important is distance to, attractiveness and size of public open space? *Am J Prev Med* (special issue on Active Living and the Built Environment) 2005;28(2S2):169-76. IF=3.167(C=128).
 70. Giles-Corti B, Timperio A, Bull F, Pikora T. (Invited Review). Understanding physical activity environmental correlates: Increased specificity for ecological models. *Exerc Sport Sci Rev* 2005;33(4):175-181. IF= 2.492 (C=101).
 71. Wood L, Giles-Corti B, Bulsara M. The pet connection: Pets as a conduit for social capital. *Soc Sci Med* 2005;61:1159-73. IF=2.619 (C=25).
 72. McCormack G, Giles-Corti B. Does participation in recommended vigorous levels of physical activity decrease participation in moderate physical activity? *J Phys Act Health* 2004;1(1):45-55.
 73. McCormack G, Giles-Corti B, Lange A, Smith T, Martin K, Pikora TJ. An update of recent evidence of the relationship between objective and self-report measures of the physical environment and physical activity behaviours. *J Sci Med Sport* 2004;7(S1):81-92. IF=0.675 (C=68).
 74. Stone G, Giles-Corti B, McBride S, Jackson B. Walk it, Bike it: Perceptions of active modes of transport. *World Trans Policy Pract* 2003;9(3):15-25.
 75. Pikora TJ, Giles-Corti B, Bull F, Jamrozik K, Donovan R. Developing a framework for assessment of the environmental determinants of walking and cycling. *Soc Sci Med* 2003;56(8):1693-703. IF=1.983 (C=117).
 76. Giles-Corti B, Wood L, Donovan R, Rosenberg M, Saunders J, Mills C. Opportunities and challenges for promoting health in a changing world. *Health Promot J Aust* 2004;15:17-23. (C=0).
 77. Giles-Corti B, English DR, Costa C, Milne E, Cross D, Johnston R. Creating SunSmart schools. *Health Educ Res* 2004;19(1):1-12. IF=1.405 (C=14).
 78. Giles-Corti B, Macintyre S, Clarkson JP, Pikora T, Donovan RJ. Environmental and lifestyle factors associated with overweight and obesity in Perth, Western Australia. *Am J Health Promot* (special issue on the built environment) 2003;18(1):93-100. IF=1.566 (C=83).
 79. Giles-Corti B, Donovan RJ. Relative influences of individual, social environmental, and physical environmental correlates of walking. *Am J Public Health* (Special Issue on the Built Environment) 2003;93(9):1583-9. IF=3.363 (C=147).

-
80. Giles-Corti B, Donovan RJ. Socioeconomic status differences in recreational physical activity levels and real and perceived access to a supportive physical environment. *Prev Med* 2002;35(6):601-11. IF=1.580 (C=195).
 81. Giles-Corti B, Donovan RJ. The relative influence of individual, social and physical environmental determinants of physical activity. *Soc Sci Med* 2002;54(12):1793-812.