

Food-sensitive planning and urban design (FSPUD)

A conceptual framework for achieving a sustainable and healthy food system

Summary Report

Food-sensitive planning and urban design (FSPUD) recognises that access to healthy, sustainable and equitable food is an essential part of achieving liveable communities.

It is an approach to planning and urban design that addresses the critical intersect between public health, planning and urban design, and environmental sustainability. FSPUD is based on the belief that the way we design our environments either deters or supports people to meet their needs. FSPUD looks at how to create places that make it easy for people to access healthy and sustainable food in urban environments. FSPUD principles outline the approaches and interventions required to shift to a more sustainable and resilient food system and ensure people can meet their food needs into the future.

FSPUD builds on the healthy environment focus pioneered by the Heart Foundation over the past 15 years¹. The concept of 'Food-sensitive urban design' was coined and articulated by the Victorian Eco-Innovation Laboratory (VEIL), Melbourne University in 2008².

This resource is intended to raise the awareness of planners, architects, urban designers, engineers, policy makers, community members and elected representatives of the need to integrate food considerations into urban land use and development. FSPUD outlines:

- key areas in planning legislation, policy and processes to realise this outcome
- how meeting people's food needs contributes to the broader objectives of planning and urban design including: health and fairness; sustainability and resilience; livelihoods and opportunity; and community and amenity
- a challenge to professionals and the broader community to take on a stronger role in ensuring that healthy, sustainable and equitable food is available for all Australians into the future.









FSPUD presents the case for prioritising food in the planning and design of our cities

Current public health nutrition issues

Nutrition related risk factors contribute significantly to disease in Australia, placing an enormous burden on economies, health systems and communities. Risk factors such as obesity, high cholesterol levels and hypertension (high blood pressure) that contribute to chronic disease, (such as cardiovascular disease and cancer), are increased by high intakes of total kilojoules (energy), saturated fat and salt, and low fruit and vegetable intake³. Only 10% of Victorians meet the healthy eating guidelines for fruit and vegetable intake, the average Australian adult eats out more than 4 times per week, and everyday 4.5 million Australians visit a fast food outlet⁴.

Disparities exist in access to healthy foods and people in low and middle socioeconomic areas are more likely to be exposed to fast food outlets than those in high socioeconomic areas⁵. Advantaged neighbourhoods have been shown to have a shorter travelling distance to the nearest supermarket or fruit and vegetable store compared to disadvantaged areas⁶.

Current planning and urban design issues

High quality agricultural land on the edge of cities is being lost to low density urban expansion to accommodate growing urban populations⁷. This problem is compounded when the design of residential areas does not provide adequate access to healthy food. Looking at the worst case scenario, this can lead to a cycle of deprivation, disadvantage and poor health⁸.

The current production, distribution and consumption of food contribute significantly to environmental impacts in Australia and food is wasted at every stage of the food system⁹.

In the Australian context, urban environments continue to generally discourage physical activity and healthy eating habits and support and promote sedentary lifestyles and unhealthy food choices¹⁰.

Easy access to healthy food choices where people live, work and play is important to achieving and maintaining health and wellbeing, and reducing transport costs¹¹. Currently planning legislation and policies do not articulate the importance of creating and maintaining a resilient and sustainable food system. Nor do they emphasise that sustainable and equitable food provision and access to food is central to net community benefit and sustainable development.

Current environmental issues

Australia's climate is changing¹². Greenhouse gas emissions are increasing at a higher rate than that projected by the International Panel on Climate Change (IPCC) in 2000. This is likely to mean that the projected impacts of climate change are conservative¹³. Consequently, we experience extreme weather events such as excessive rain, drought, hailstorms and frosts which have a significant effect on food production^{14, 15, 16}.

The cost and availability of fossil fuels is integral to the current food system, making it vulnerable to peak oil. As demand for oil grows over the next decade there will not be sufficient production capacity to meet demand¹⁷. This will present significant challenges to businesses and consumers¹⁸.

Currently, our food system is grappling with the scarcity and/or cost of critical resources such as water, energy and non-renewable sources for agrochemicals and fertilisers. The decline and degradation of these critical resources is recognised globally as the major challenge to equitable provision of adequate food to growing populations.

Crisis or opportunity?

FSPUD is a response to necessity and urgency, and provides new and exciting opportunities to plan, design and build a healthy, sustainable and equitable food system for our cities and surrounding regions. This document sets out a new agenda for the complementary integration of planning objectives and food system objectives.



FSPUD provides tools, suggestions and case studies to enable the practical reconciliation of food considerations with planning and urban design objectives.

The FSPUD matrix

The FSPUD matrix is a tool for exploring the integrated nature of planning objectives and the four main stages of a sustainable and resilient food system. The matrix facilitates the examination of land use and/or development proposals by providing a method of teasing out the challenges and opportunities presented by the proposal. In addition, key statements have been provided to prompt thinking, analysis and review of the broad range of issues that must be considered as part of FSPUD.

	Health and fairness	Sustainability and resilience	Livelihoods and opportunity	Community and amenity
Producing Food	Α			
Processing and transporting Food				
Consumer access and utilisation				
Waste and re-use				В

Through FSPUD we can develop a shared understanding of how the urban environment can incorporate planning and design elements that support a resilient, localised, healthy and sustainable food system. This will enable Australian communities to become more active through stronger connections with local environments, and improve food access that supports people to meet their food needs and enjoy better health and wellbeing. Changing how we think about land use and development will enable communities to effectively overcome some of the greatest threats of our era.

FSPUD principles ensure we can:

- → enjoy attractive, amenable and liveable environments
- maintain and enhance a strong and competitive economy
- → achieve major reductions in the ecological footprint of our settlements
- provide innovative opportunities for stronger community interaction
- → design and develop better shared urban spaces
- → achieve fair and equitable access to the appropriate food sources and services that people need
- → create supportive environments for active living
- provide all of the above with a resilience to challenges such as climate change, peak oil and resource scarcity.

FSPUD was written by Jenny Donovan (David Lock Associates), Kirsten Larsen (VEIL, University of Melbourne) and Julie-Anne McWhinnie (Heart Foundation). It was commissioned by the Heart Foundation with part-funding provided by VicHealth. The complete FSPUD resource can be downloaded from the Heart Foundation website: http://www.heartfoundation.org.au/Search/Pages/Results.aspx?k=Active%20Living

For further information contact Kirsty Morieson, Active Living Senior Project Officer at kirsty.morieson@heartfoundation.org.au



- National Heart Foundation of Australia. Healthy by design: a planner's guide to environments for active living. Melbourne: National Heart Foundation of Australia, 2004. Available from www.heartfoundation.org.au/SiteCollectionDocuments/Healthy%20 by%20Design.pdf. Accessed 30 September 2010.
- Larsen K. Food Sensitive Urban Design. Presentation. Sydney: University of Sydney, Agri-Food XV conference, 2008: 25-29 November. Available from www.ecoinnovationlab.com/uploads/ attachments/123_VEIL%20FSUD%20FINAL%20small.pdf. Accessed 30 September 2010.
- Australian Institute of Health and Welfare. Australia's Health 2006.
 Cat. No. AUS 73. Canberra: Australian Institute of Health and Welfare, 2006.
- 4. BIS Shrapnel. Foodservice in Australia 2007. Volume 1: Market insights and market size. Sydney: BIS Shrapnel, 2007.
- Kavanagh A, Thornton L, Tattam A, et al. Place does matter for your health: Victorian Lifestyle and Neighbourhood Environment Study. Melbourne: University of Melbourne, 2007. Available from www. kcwh.unimelb.edu.au/_data/assets/pdf_file/0005/55085/VicLanes_ Report.pdf. Accessed 30 September 2010.
- Ball K, Timperio A, Crawford D. Neighbourhood socioeconomic inequalities in food access and affordability. Health and Place 2009; 15 (2): 578-85.
- Buxton M, Goodman R. Monograph: Maintaining Melbourne's Green Wedges: Planning and Policy and the Future of Melbourne's Green Belt. Melbourne: RMIT University 2002 p76.
- Engels B, Nissim R, Landvogt K. Under pressure: costs of living, financial hardship and emergency relief in Victoria. Victoria: Victorian Council of Social Service and Emergency Relief Victoria, 2009. Available from www.vcoss.org.au/documents/VCOSS%20 docs/Emergency%20Relief/ER%20report-Final_withCover.pdf. Accessed 30 September 2010.
- Department of Sustainability and Environment, Victoria.
 Metropolitan waste and resource recovery strategic plan.
 Melbourne: Department of Sustainability and Environment, 2009.

- BIS Shrapnel. Foodservice in Australia 2007. Volume 1: Market insights and market size. Sydney: BIS Shrapnel, 2007.
- Froggatt A, Lahn G. White paper: Sustainable energy security

 strategic opportunities and risks for business, 2010. London:
 Chatham House Lloyds 360 Risk Insight, 2010. Available from www.chathamhouse.org.uk/files/16720_0610_froggatt_lahn.pdf.
 Accessed 30 September 2010.
- 12. CSIRO. Fact Sheet: Learning to adapt to future climates. Melbourne: CSIRO, 2009. Available from www.csiro.au/resources/Learning-To-Adapt--ci_pageNo-2.html. Accessed 30 September 2010.
- Climate Adaptation Science and Policy Initiative. Evidence of accelerated climate change. Sydney: The Climate Institute, 2007.
- 14. Larsen K et al. Sustainable and secure food systems for Victoria: What do we know? VEIL Research Report no. 1. Melbourne: University of Melbourne, Victorian Eco-Innovation Lab, 2008. Available from www.ecoinnovationlab.com/uploads/attachments/018_VEIL_Food_Report_-_Full.pdf. Accessed 30 September 2010.
- Australian Bureau of Statistics. Principal agricultural commodities, Australia 2007-08. Cat. No. 7111.0, Canberra: Australian Bureau of Statistics, 2008.
- Department of Primary Industries, Victoria. Dry seasonal conditions in rural Victoria. Report No. 86. Victoria: Department of Primary Industries, 2009.
- International Energy Agency. World energy outlook 2009:
 Presentation to the press. London: International Energy Agency,
 2009. Available from www.iea.org/speech/2009/Tanaka/WEO2009_
 Press_Conference.pdf. Accessed 30 September 2010.
- Froggatt A, Lahn G. White paper: Sustainable energy security

 strategic opportunities and risks for business, 2010. London:
 Chatham House Lloyds 360 Risk Insight, 2010. Available from www.chathamhouse.org.uk/files/16720_0610_froggatt_lahn.pdf.
 Accessed 30 September 2010.