

Melbourne was declared the 'world's most liveable city' for an unprecedented seventh successive year in the Economist Intelligence Unit Survey 2017. This recognition is the result of a conscious and sustained deployment of Melbourne's infrastructure and urban design expertise over recent decades to transform the Victorian capital into an internationally notable urban centre.

Making Melbourne a more liveable city has been a key objective of the city's economic development and growth strategy. Melbourne's urban design strategies are grounded in the recognition that liveable cities attract creative and innovative people and, in turn, creative and innovative people attract high-value industries.



## **INFRASTRUCTURE DEVELOPMENT**

The Victorian Government recently released the <u>Victorian Infrastructure Plan</u>, a 30-year strategy to deliver a long-term infrastructure pipeline for the whole of Victoria. Catalyst projects include the \$11 billion Metro Tunnel to transform Melbourne's public transport system, \$6.9 billion to remove Melbourne's 50 most dangerous level crossings and \$100 million for the first stages of the North East Link.

These projects will reduce congestion and get people where they need to be quickly and safely.

## SUSTAINABLE BUILDING

Melbourne has experienced an architectural and design renaissance in recent years and now boasts some of the most innovative buildings and infrastructure in the world. Australia is at the forefront of green building and sustainable building practices using design and planning processes that are environmentally responsible and resource efficient.

One notable example of this is Melbourne's Pixel building (pictured). Scoring a perfect 105 Green Star points and 105 LEED points, Pixel is Australia's first carbon neutral office building, generating all its own power and water on site. Pixel is a 'Future Office' - a prototype of the commercial buildings that will emerge when a carbon constrained environment demands a greater focus on energy efficiency. As a prototype, it enables an analysis of the ongoing implications of new technologies in the commercial building sector.

## **RESEARCH & DEVELOPMENT**

Victoria's pre-eminence in infrastructure and urban design is grounded in its internationally recognised expertise in areas such as advanced manufacturing, architectural design and the social sciences. Melbourne is home to many dedicated research and development centres across a broad range of specialisations that collectively make the state a powerhouse in meeting the evolving challenges of creating liveable cities.

Deakin University's <u>Institute for Intelligent Systems Research and Innovation</u> (IISRI) contributes to research and development of robotics, haptics, and human machine interfaces, as well as process simulation, visualisation, and optimisation through state-of-the-art methodologies that provide practical solutions to real world problems with uncertainty, variability and change.

Also based at Deakin University, the <u>Centre for Advanced Design in Engineering Training</u> (CADET) signals a new era in engineering and industrial design education in Australia. A partnership between Deakin University and the Australian Government, the \$55 million state-of-the-art facility houses some of the most advanced and future-focused simulation and visualisation systems, purpose-built interactive laboratories and learning environments in the country.

RMIT University's <u>Centre for Urban Research</u> (CUR) is a dynamic hub for interdisciplinary urban research. Through its research, the Centre is directly responding to the globally important need to shape cities that are environmentally, socially and economically sustainable. It provides leadership in the study of critical urban issues such as urban planning, public policy geography, economics, environmental sciences, spatial analysis, history, and sociology.

Swinburne University's <u>Centre for Urban Transitions</u> investigates innovative planning and governance strategies for creating more liveable, sustainable, equitable, healthy and productive cities. The Centre's research addresses some of Australia's most significant social, economic and environmental problems.

Swinburne's **Social Innovation Research Institute** collaborates with partners for intelligent, citizen and consumer engaged social solutions to complex social problems. The Institute is passionate about increasing inclusion, raising wellbeing, using technology to disrupt entrenched practices and co-designing useful services and products.

**AURIN** is a national collaboration delivering e-research infrastructure to empower better decisions for Australia's human settlements and their future development. Led by The University of Melbourne, AURIN collaborates with more than 80 institutions and data providers across Australia through contracted subprojects and Data Access Agreements. The \$28 million AURIN initiative is building the e-research infrastructure to enable better understanding of the current state of Australia's cities and towns and to meet the challenges they face.

