

Melbourne has been the transport gateway to the rest of Australia for nearly two centuries and our public transport network extends from the city centre in all directions, with trains, trams and buses offering comprehensive public transport services.

Melbourne is Australia's centre for automobile, aviation and rail manufacturing, engineering and design.



OPEN 24/7

Melbourne International Airport is Australia's only curfew free airport

AUTOMOTIVE R&D AND ENGINEERING

Melbourne's history of more than 100 years in vehicle R&D and manufacturing has resulted in generations of expertise and broad industry capability. With its cluster of manufacturing, tooling and design facilities, it is one of the few locations in the world that can take a vehicle through the entire design and engineering spectrum.

This comprehensive capability has resulted in a number of global companies, including GM Holden, Toyota, Ford, Kenworth and Iveco, having their design and engineering capacity in the state.











AVIATION & AEROSPACE

Melbourne has been at the centre of aircraft manufacturing and maintenance in Australia for over half a century. Victoria's aviation and aerospace sector employs over 22,000 people in more than 500 businesses – making it the biggest in Australia. Melbourne boasts Australia's largest concentration of aviation and aerospace education and training facilities, ensuring a steady supply of high-calibre skilled people are ready to enter the workforce.

An established aerospace precinct brings together manufacturers, design organisations, educational providers and research facilities.

AVIATION AND AEROSPACE R&D

Melbourne has an excellent R&D base, with proven success in global design projects. The Australian Advanced Manufacturing Research Centre (AusAMRC) is a collaboration between Boeing and Swinburne University to develop technology-driven solutions ensuring Australian suppliers are among the most innovative, competitive and capable in the world.

Advanced Composite Structures Australia has built a global reputation for composites research in close collaboration with industry over the last 20 years. It is a world leader in composites technology development and implementation, partnering with customers to enable innovative design, low-cost manufacture and support of application-critical composite structures.

The <u>HA Wills Structures and Materials Test Centre</u> is an internationally recognised state-of-the-art facility for materials testing, particularly the fatigue testing of aircraft structures. The research work involves the testing of small coupons and aircraft components, through to placing actual airframe structures in large purpose built rigs fitted with hydraulic, electrical and/or pneumatic actuators that apply forces to simulate the loads that an airframe typically experiences in flight.

The <u>Sir Lawrence Wackett Aerospace Centre</u> based at RMIT University partners with industry to lead fundamental and applied research into aerospace related science and technologies. RMIT University established the Wackett Aerospace Research Centre in 1991 with a vision to be a world leader in aerospace related science and technology research.

MELBOURNE ON TRACK

In Melbourne trams are the second most used form of public after the commuter railway network, with a total of 204 million passenger trips in 2016-17. Public Transport Victoria continuously delivers a large program of works to upgrade the network, improving its accessibility, capacity, reliability and safety.









RAIL TECHNOLOGY R&D

The **Rail Manufacturing Cooperative Research Centre** (CRC) supports the rail sector by developing new technologies and knowledge to enhance Australia's rail manufacturing capacity and competitiveness. Formed in 2014, members include innovative rail manufacturing multinationals, innovative SMEs and key research providers.

The aim of the CRC is to assist industry to transform the global rail manufacturing supply chain by fostering, sponsoring and directing collaborative research and innovative commercialisation partnerships between key stakeholders in the rail manufacturing sector.

INTELLIGENT TRANSPORT SYSTEMS

La Trobe University's Centre for Technology Infusion is working in partnership with HCL Technologies (headquartered in India) to develop and commercialise intelligent transport systems that let vehicles 'talk' with other vehicles and transport infrastructure, with the potential to address traffic management problems, enhance driver safety and provide logistics support for transport operations.

The Centre for Technology Infusion is developing innovative solutions for multimodal Cooperative Intelligent Transport Systems that can improve drivers' commutes, provide better information to city planners, increase the productivity of businesses, raise citizens' quality of life, reduce congestion, shrink fuel use and cut carbon emissions.

More than eleven years in the making, over 11,000 delegates from over 73 countries converged on Melbourne in October 2016 as the city played host to the largest ever intelligent transport systems (ITS) conference in Australia – the 23rd Intelligent Transport Systems World Congress (ITS 2016).



Centred around the theme 'enhancing liveable cities and communities' Melbourne was the ideal host city to demonstrate this theme, named for seven consecutive years as the World's Most Liveable City, with liveability enhanced by intelligent transport systems contribution to the community.

The congress provided a platform for private corporations, public agencies and academic institutions involved in the research, design and implementation of ITS technologies to present new innovations and research and discuss issues and opportunities within the sector.

New innovations were launched at the congress, such as new traffic control, smart mobility software and major breakthroughs in connected cars. A driverless car built in Melbourne and endorsed by the Victorian State Government was trialled and showcased to global media and industry on the state's roads.

