Airports have potentially serious health impacts (predominantly related to aircraft and heavy traffic in and out of the facility such as air, noise, water and soil pollution). These impacts are offset, in a systems view, by investments in the ‘social determinants of health’ (see the rainbow model of Whitehead and Dahlgren).

Good employment is good for health. Economic growth may benefit everyone’s well-being. A healthy local agricultural, food and catering system would benefit the wider population. Well managed accessibility planning would be good for age-friendly and health environments.

A highly qualified and well-trained diverse workforce is a healthier workforce. Advanced clinical and public health services for that workforce, travelers and visitors would benefit the wider population of Western Sydney and beyond. Innovative occupational and industrial practices would boost peoples’ growth opportunities.

Airports are engines for health and well-being.

The Australian Federal Government announced in 2014 that the Sydney basin would finally have its second international airport. Western Sydney Airport, located in the Badgerys Creek area of Liverpool Council and the South Western Sydney Local Health District, will commence operations in 2026.

The announcement has been welcomed by many. In particular the economic opportunities of a ‘greenfields airport’ are promised to be an important addition to Western Sydney, an area currently characterised by lack of employment and infrastructure. The concept of an ‘aerotropolis’ as an economic airport city hub is attractive.

Major transformative infrastructure change and development, however, also has its impact on human development and population health. The Centre for Health Equity Training, Research and Evaluation (a research hub with UNSW and an intelligence unit in the Health District’s Population Health Division) has developed a vision for airports as engines of health, and not just as a source of economic wealth.
As soon as Western Sydney Airport entered the planning pipeline in 2014 the Centre for Health Equity Training, Research and Evaluation (CHETRE) (a research hub with UNSW and an intelligence unit in the Health District’s Population Health Division) was asked to look at its health impacts. CHETRE has a global reputation in ‘Health Impact Assessments’ (HIAs) and the World Health Organization’s (WHO) ‘Healthy Cities’ programme.

CHETRE partnered with the Western Sydney Community Forum and Chamber of Commerce to develop an HIA on the health effects of the community engagement process. The research found that when all stakeholders are heard, the planning process yield better results and a better airport.

With the University of New South Wales (Built Environment) and a broad group of health experts from the Local Health District, CHETRE reviewed the existing health evidence of airports, and connected these findings with the WHO Healthy Cities qualities that have inspired thousands of cities around the world since the early 1980s. Cities are sources, not threats, of health.

### Dimension | A Healthy Airport:
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**Environment** | Engages in planning processes that result in health promoting aesthetic built environments
| Provides a clear, safe, high quality social and physical environment for all people inside the airport boundary and in surrounding communities
| Ensures that systems that are in place to protect individual and collective safety and security are implemented in least-intrusive ways conducive with their specific purpose

**Ecosystem** | Creates, maintains and aligns with governance, policies and practices for a sustainable ecosystem
| Protects as much as possible the natural ecosystems within and beyond the airport boundaries
| Addresses sustainability principles
| Relocates its environmental footprint (particularly regarding carbon emissions and waste generation) to the greatest extent possible, with the aim of being carbon neutral by 2020
| Reflects local communities’ aesthetic/ connection to landscape and environment (e.g. local flora/biomes/places open space, etc)

**Community** | Builds on consultative/participatory community engagement to ensure fairness and equity in roles and benefits
| Ensures an inclusive, respectful and mutually supportive community through consultative processes
| Actively pursues its ability to build positive social change outside the boundaries of its general business

**Participation** | Implements governance structures that enable a high degree of public participation in and control over the decisions affecting one’s life, health and well being
| Provides avenues for all airport users (e.g. employees, travelers and people accompanying them, visitors) and members of communities affected by the airport’s operations with effective means of providing feedback on the airport’s operations and involvement in decisions that will affect them

**Basic services and facilities** | Ensures that hygienically prepared food and beverages are available that meet a wide range of preferences and price
| Ensures that potable water is available free of charge throughout the airport
| Ensures that all activities at the airport are conducted with adherence to high standards of workplace health and safety
| Ensures that conditions of employment for all persons working at the airport are meeting appropriate (international) standards
| Offers healthy food choices, including meeting the needs of all diet requirements when travelling in and in the airport
| Ensures equitable transport options for workers and visitors

**Experiences and resources** | Provides a range of passive and active recreational spaces and activities for residents, workers and visitors
| Provides a wide range of opportunities for visual and physical and mental activity for persons visiting the airport
| Provides family friendly activities for travelers and people waiting
| Provides accessible and accessible connections to internet (social media)

**Economy** | Creates and sustains a lively economy that supports a diversified skill set within local industry and provides opportunities for advancement
| Makes a vital and innovative contribution to the economy of the region around the airport
| Provides equitable employment

**Heritage** | Maintains and promotes the historical, social, economic, geographic and culture contexts of the region
| Provides many tangible links with the historical, cultural and biological heritage of the region in which it is located

**Form and design** | Has a physical form that is compatible with and enhances all the other elements of a Healthy Airport

**Public health and health care services** | Engages in activities that promote and maximise the health of individuals, peoples and communities
| Provides appropriate services for the promotion of health, prevention of disease, and protection from conditions creating ill health that are easily accessible by all who need them, particularly travelers and employees, across the spectrum of physical, mental and spiritual well-being

**Physical, transport and cognitive connectedness** | Is designed to make people feel welcomed
| Is designed to blend into the region and culture
| Recognizes its global (the interlace between global and local) footprint in all of the above qualities
| Provides travel-friendly, easy, accessible and affordable public transport links

**Health hazards and risks** | Works proactively and in collaboration with potentially affected communities and individuals to reduce health risks and build health resilience
| Aims to meet and exceed the strictest standards in noise, air, water and soil pollution

Based on the Healthy Cities research and community engagement process, CHETRE found that a Healthy Airport can embrace twelve aspirational dimensions (below). Each of these has a geo-spatial dimension.

The health impacts and potentials of an airport do not stop at its fence and can be seen as a footprint that reaches beyond the visual horizon.

These views were presented to key stakeholders in the global aviation industry at an international conference where ICAO (the International Civil Aviation Organization) and ACI (Airports Council International) saw these ideas as a new stage in airport and metropolex evolution.

Western Sydney Airport has an opportunity to become a new global benchmark. It should not just aspire to be a new aerotropolis. It can become the centre of a new health region, the Healthy Airport region.

CHETRE is ready to invest in this process with its partners around the world. Contact us to see what roles are possible.