Healthy Airports
A Research & Development agenda
Professor Evelyne de Leeuw

Director

CHETRE
Healthy Airports: rationale and outline

Western Sydney Airport

Western Sydney Airport

Set to open in 2026, Western Sydney Airport is a transformational infrastructure project that will generate economic activity, provide employment opportunities closer to home for people in the Western Sydney region, and meet Sydney's growing aviation needs.
Our interest in airports:

- Healthy Settings (Healthy Cities)
- Health Impact Assessment
- ‘Locational disadvantage’, equity, diversity
- Determinants of health
- (enthusiasm for the aviation industry)

Building on Australia’s aviation standing & history:

set global benchmark for best airport design & operation
International and domestic aviation connects Australians with each other and with the rest of the world. It is also central to the Australian economy.

The Australian Government, through the Department, contributes to the prosperity of the economy and the wellbeing of all Australians by fostering a viable, competitive and safe aviation industry.

The Department advises the Government on the policy and regulatory framework for Australian airports and the aviation industry, manages the administration of the Government's interests in privatised airports under the Airports Act 1996, and provides policy advice to the Minister on the efficient management of Australian airspace and on aircraft noise and emissions.
Greenfields airport developments rare (e.g., Ürümqi Diwopu; Sydney West)

They provide unique opportunities

- ... for economic development and associated footprints

- ... in response to demographic change and needs/demand

And in terms of *response* to change and need but also proactively

Airport infrastructure is an opportunity for health, education, ...
Airports as engines for health

CITY IN THE SKY
Virtually all the (social) determinants of health are associated with ‘the most highly engineered environments on earth’
Can airports really be healthy?

A WESTERN SYDNEY AIRPORT
THREATENS
OUR LIFESTYLE
AND
OUR CHILDREN’S FUTURE

WE DESERVE BETTER THAN...
X TO WAIT 40 YEARS FOR AIRPORT JOBS
X 24/7 JET NOISE OVER HOMES AND SCHOOLS
X INCREASED TRAFFIC AND AIR POLLUTION
X INCREASED ADHD AND HEALTH RISKS

WESTERN SYDNEY DESERVES BETTER!
WE DESERVE...

JOBS NOW
We can’t wait 40 years for airport jobs. We deserve schools, hospitals, police and public services now.

A FAIR NIGHTS SLEEP
Turnbull and Albanese enjoy a curfew but will deny us one. 24/7 operations. Constant sleep disturbance will affect our health and mental wellbeing.

ASTHMA RELIEF AND CLEAN AIR
Airport will bring massive road congestion and air pollution worsening asthma rates.

DECENT PUBLIC TRANSPORT
AND BETTER ROADS
No rail connections or new roads will cause a complete traffic disaster.

THE GOV’T. TO STOP WASTING
OUR TAXES
$5 to 10 billion on an airport decades away is a waste of money. There is no guarantee it will be profitable and generate jobs.

We deserve our taxes to be spent on jobs and services for the west - now!

WHAT CAN I DO?
CONTACT YOUR LOCAL MEMBER OF PARLIAMENT
Western Sydney MPA
Lindsay - Emma Husar - emma.husar.mpl@aph.gov.au
Macarthur - Mike Freeland - mike.freeland.mpl@aph.gov.au
Macarthur - Chris Bowen - chris.bowen.mpl@aph.gov.au
Warringah - Ed Husic - ed.husic.mpl@aph.gov.au
Greenway - Michelle Rowland - michelle.rowland.mpl@aph.gov.au
Fowler - Chris Hayes - chris.hayes.mpl@aph.gov.au
Mitchell - Alex Hawke - alex.hawke.mpl@aph.gov.au
Warringah - Anne Stanley - anne.stanley.mpl@aph.gov.au
CONTACT DECISION MAKERS
Paul Fletcher, Urban Infrastructure Minister paul.fletcher@aph.gov.au (Liberal)
Anthony Albanese, Shadow Infrastructure Minister a.albanese.mpl@aph.gov.au (Labor)

WRITE LETTERS
Write letters to your local newspapers and federal politicians telling them you do not want this airport and why. Tell them your support for this airport is a bad idea.

TALK
Talk to your friends, family and neighbours and drop the airport.

MORE INFORMATION
- Idle syllabus (Councils against the Sydney airport
- www.sydneyruralcommunity.org.au

Spread the word.
Is this the aerotropolis idea?

The new "aerotropolis" will be known as the Greater West City. It will feature convention and exhibition complexes, produce markets, hotels, and sporting stadiums. A tender could also be held for international universities to set up near the airport.

1. **High Speed Rail**
   A new high-speed rail could feature stops at the airport, Elizabeth Park and Parramatta, as part of efficient passenger transfer.

2. **New Road Links**
   The M9 and M12 will provide efficient road links into the rest of Sydney.

3. **Freight Hub**
   An inter-modal freight hub will allow the transport of goods from the airport to greater Sydney and beyond.

4. **New Cities**
   Two new mini-cities will be created around the airport: a north city and a south city. By 2050, both will initially be on a similar scale to the proposed Sydney Olympic Park redevelopment - with about 10,000 new units in each.

It's not just the airport zone that is about to boom. The "String of Pearls" - Penrith, Blacktown, Liverpool and Campbeltown - will also see 30-55 per cent population growth through to 2036.

**Jobs Bonanza**

The new airport is already creating jobs, before a sod is turned. Road expansions near Badgerys Creek have created more than 430 new jobs near the airport site. Assistant City Minister Angus Taylor said.

**Elizabeth Park**

The Elizabeth Park Industrial Zone will become the beating heart of the new aerotropolis. It will create 80,000 new jobs entirely dependent on the new airport.
‘...metropolitan subregions whose infrastructure, land-use, and economy are centred on an airport.

(...) 
...the aerotropolis consists of a multimodal airport-based commercial core (Airport City) and outlying corridors and clusters of aviation-linked businesses and associated residential developments’

(John Kasarda, 2017)
Is ‘Healthy Airports‘ an aerotropolis idea?

No.

The aerotropolis is an urban (airport) planning conceptualisation...

...for economic development

We cast the net wider:

The Healthy Airport (Region) is a dynamic systems view...

...for human development
A clean, safe, high quality physical environment (including housing quality)

An ecosystem which is stable now and sustainable in the long term

A strong, mutually supportive and non-exploitive community

A high degree of public participation in and control over the decisions affecting one’s life, health and well-being

The meeting of basic needs (food, water, shelter, income, safety, work) for all the city’s people

Access to a wide variety of experiences and resources with the possibility of multiple contacts, interaction and communication

Encouragement of connectedness with the past, with the cultural and biological heritage and with other groups and individuals

A city form that is compatible with, and enhance the above parameters and behaviours

An optimum level of appropriate public health and sick care services accessible to all

A diverse, vital and innovative city economy

High health status (both high positive health status and low disease status)
The Healthy Metroplex (spatial take):

Regional impact and influence
Communities involved and affected by airport
(Public) transport, parking, access
Workforce – stationary (at airport) and airborne
Feed and waste infrastructure and logistics
Landside infrastructure and operations
Airside infrastructure and operations

Airport Region A
Airport Region B
The Essence of the Healthy Airport

People

Goods

Services
The Healthy Airport - Definition

... an ever-evolving complex human enterprise

... centered on actions, policies and general governance arrangements

... that enable the efficient and timely movement of people, goods and services,

... both through aircraft using it as a departure and arrival base as well as in its terrestrial supply and waste chains,

... aimed at shaping all health creating conditions within its spatial, commercial and perceptual footprints

..... responsive to the unique character and composition of the people and communities that live around and engage with the airport

... to maximise health potential and minimize health hazards
<table>
<thead>
<tr>
<th>Dimension</th>
<th>A Healthy Airport:</th>
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<tbody>
<tr>
<td>Environment</td>
<td>• Engages in planning processes that result in health promoting aesthetic built environments</td>
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<td></td>
<td>• Provides a clean, safe, high quality physical environment for all people inside the airport boundaries and in surrounding communities.</td>
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<td>• Ensures that systems that are in place to protect individual and collective safety and security are implemented in least-obtrusive ways conducive with their specific purpose</td>
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<td>Ecosystem</td>
<td>• Creates, maintains and aligns with governance, policies and practices for a sustainable ecosystem</td>
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<td>• Protects as much as possible the natural ecosystems within and beyond the airport boundaries.</td>
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<td></td>
<td>• Addresses sustainability principles</td>
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<td>• Reduces its environmental footprint (particularly regarding carbon emissions and waste generation) to the greatest extent possible, with the aim of being carbon neutral by 2040.</td>
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<td>• Reflects local communities’ sensitivity/connection to landscape and environment (e.g. local flora/fauna/open spaces, etc.)</td>
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<td>Community</td>
<td>• Builds on consultative/participatory community engagement to ensure fairness and equity in risks and benefits</td>
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<td></td>
<td>• Ensures an inclusive, respectful and mutually supportive community through consultative processes</td>
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<td></td>
<td>• Actively pursues its ability to build positive social change outside the boundaries of its general business</td>
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<td>Participation</td>
<td>• 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</td>
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<td></td>
<td>• 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</td>
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<tr>
<td>Basic services and facilities</td>
<td>• Ensures that hygienically prepared food and beverages are available that meet a wide range of preferences and prices</td>
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<td>• Ensures that potable plain water is available free of charge throughout the airport</td>
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<td>• Ensures that all activities at the airport are conducted with adherence to high standards of workplace health and safety</td>
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<td>• Ensures that conditions of employment for all persons working at the airport are meeting appropriate (inter)national standards</td>
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<td></td>
<td>• Offers healthy food choices, including meeting the needs of all diet requirements when travelling and in the airport</td>
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<td></td>
<td>• Ensures equitable affordable transport options for workers and visitors</td>
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<tr>
<td>Experiences and resources</td>
<td>• Provides a range of passive and active recreational spaces and activities for residents, workers and visitors</td>
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<td>• Provides a wide range of opportunities for relaxation and physical and mental activity for persons waiting at the airport</td>
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<td></td>
<td>• Provides free family friendly activities for travelers and people waiting</td>
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<td></td>
<td>• Provides accessible and acceptable connectedness to internet and (social) media</td>
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<tr>
<td>Economy</td>
<td>• Creates and sustains a lively economy that supports a diversified skill set within local industry and provides opportunities for advancement</td>
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<td>• Makes a vital and innovative contribution to the economy of the region around the airport</td>
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<td></td>
<td>• Provides equitable employment</td>
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<tr>
<td>Heritage</td>
<td>• Maintains and promotes the historical, social, economic, geographic and cultural contexts of the region</td>
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<td>• Provides many tangible links with the historical, cultural and biological heritage of the region in which it is located</td>
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<td>Form and design</td>
<td>• Has a physical form that is compatible with and enhances all the other elements of a Healthy Airport</td>
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<tr>
<td>Public health and health care services</td>
<td>• Engages in activities that promote and maximise the health of individuals, peoples and communities</td>
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<td></td>
<td>• 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</td>
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<td>Physical, transport and cognitive connectedness</td>
<td>• Is designed to make people feel welcomed</td>
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<td></td>
<td>• Is designed to blend into the region and culture</td>
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<td>• Recognizes its glocal (the interface between global and local) footprint in all of the above qualities</td>
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<td></td>
<td>• Provides healthful, easy, accessible and affordable public transport links</td>
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<td>Health hazards and risks</td>
<td>• Works pro-actively and in collaboration with potentially affected communities and individuals to reduce health risks and build (health) resilience</td>
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<td></td>
<td>• Aims to meet and exceed the strictest standards in noise, air, water and soil pollution</td>
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Healthy Airports have runways/concepts
We have been busy consulting

“The 21st century model of a great airport is a multimodally connected facility with human dimensions.”
Determinants of health in existing airport planning parameters

Growth, footprints, mobility and connectedness scenarios

Governance and indicators for Healthy Airports

The wellbeing of all Australians
The Centre for Health Equity Training, Research and Evaluation is part of, and partners with, the University of New South Wales (Sydney, Australia), South Western Sydney Local Health District, the Ingham Institute for Applied Medical Research (Liverpool) and is accountable to the Tharawal Aboriginal Corporation. CHETRE works with its partners ‘to co-create intelligence for better health’.

It does so in three work streams:

- Spatial and locational disadvantage
- Decision support systems (including Health Impact Assessment)
- Cohort and social determinants of health research with Indigenous populations and communities

CHETRE is a founding organisation of the Urban Health Incubator and builds on a global track record in collaborative work, partnership development and management, health political science and urban health development.

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