



# Inquiry into Environmental Infrastructure for Growing Populations

Legislative Assembly  
Environment & Planning Committee

Infrastructure Victoria



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30-year  
infrastructure strategy



Independent advice  
to government



Research



Values (independence, influence,  
partnership, openness, innovation,  
people)

# WHO WE ARE AND WHAT WE DO



# VICTORIA'S 30-YEAR INFRASTRUCTURE STRATEGY



Inaugural strategy released in 2016



Strategy update developed to:

- Reflect developments & priorities (including COVID-19)
- Reflect new information/research
- Reflect changes in policy
- Respond to emerging challenges



Community consultation a central element and required by *Infrastructure Victoria Act 2015*



Final updated version will be delivered to Parliament in mid-2021

# IMPORTANCE OF ENVIRONMENTAL INFRASTRUCTURE

- Multiple functions for ecological and human populations
  - Open space
  - Vegetation
- Priority for local communities
  - Density and more than the minimum of green space
  - Connection to nature and open space
- Benefits
  - Public health and wellbeing
  - Improving biodiversity
  - Helping reduce urban temperatures



# DENSITY DONE WELL – THE PRINCIPLES

**1**

**QUALITY URBAN DESIGN**

- a Quality design and production of built form that's well integrated into local design character including green space (more than the bare minimum) and sustainability of environment
- b Diverse mix of residential and industrial and commercial development to genuinely support 20-minute neighbourhoods and public transport
- c Maintain the integrity of the natural environment including fauna and flora



**2**

**PUBLIC TRANSPORT**

First and foremost must be accessible (not only in terms of ability/disability), but also in terms of reasonable distance from dwellings and services. Must be reliable and frequent, safe, clean and affordable. Must be interconnected with other transport modes (physically and in terms of timetables) and provide cross-suburb connectivity (including non-radial)



**3**

**HOUSING AFFORDABILITY AND CHOICE**

A range of living options including what people can afford and a range of housing models to meet diverse community needs) supported by integrated services and support to represent diversity



**4**

**GOOD PUBLIC ENVIRONMENT**

Includes safe, adaptable multi-functional spaces and green space in proportion with density, technology, environmentally sustainable built infrastructure for diverse (age, culture and disability) communities and reflects the cultural elements of that neighbourhood



**5**

**PEDESTRIAN FRIENDLY**

Safe, well maintained, energy efficient, well lit pathways that prioritise people with all abilities that follow logical pedestrian desire and made of environmentally friendly material and technology i.e. sensor lights. These should be designed with amenity in mind (seats, shade, water fountains, bins)



**6**

**ACCESSIBLE PLACES**

Neighbourhoods must be designed to be accessible for all, with comprehensive transport connections, where the community needs are reachable within a 20-minute walk



**7**

**COMMUNITY SAFETY**

- a Create structures and resourcing that support the community to take ownership of their own and others' safety supported by local government services including law enforcement
- b Sufficient lighting and other measures to allow use of community hubs after hours



**8**

**INCLUSION**

- a Inclusion ensures representation through a voice, opportunity, access and sense of belonging for all cross-sections of the community i.e. age, ability, ethnicity, sexual orientation, etc.
- b Inclusion requires appropriate spaces, housing, facilities, events, resources and physical and social infrastructure to ensure a seamless and enjoyable experience for people of all abilities and circumstances



**9**

**MIX OF USES / DIVERSITY OF THINGS TO DO**

Meet the changing needs of the people who live there by including multi-faceted green spaces and multi-flexible inclusive facilities therefore maintaining an inclusive community feel



# CHALLENGES FOR ENVIRONMENTAL INFRASTRUCTURE

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- Population growth
- Established urban areas
  - Open spaces are not connected
  - Publicly owned land is not available to be used as open space – for example: government schools, golf courses
  - Reduced canopy cover on private property
- New growth areas
  - Particularly vulnerable to heat and fewer trees to provide shade and support cooling
  - Land available for canopy trees has dramatically reduced in new suburbs



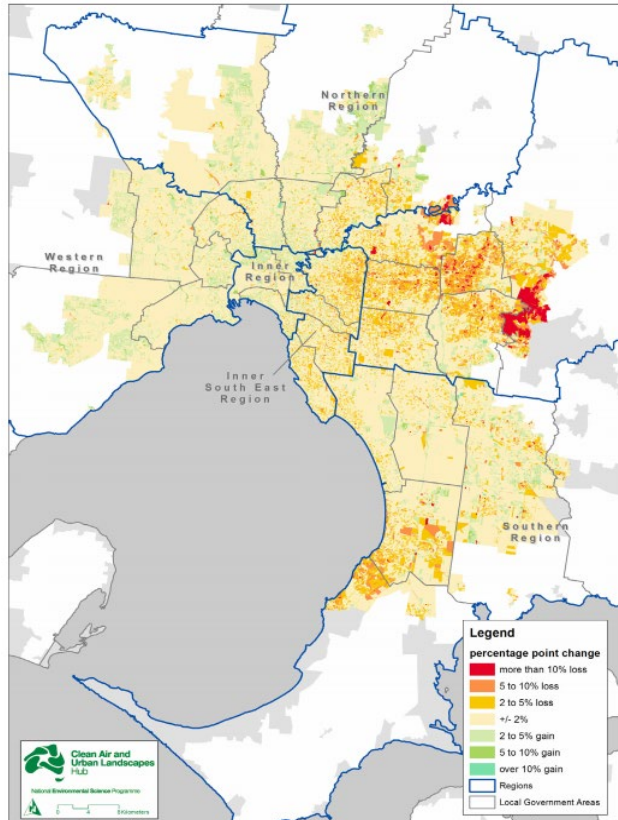
# ESTABLISHED AREA CHALLENGES



## Open space connectivity

Source: <https://vpa.vic.gov.au/strategy-guidelines/metropolitan-open-space-network/>

# ESTABLISHED AREA CHALLENGES



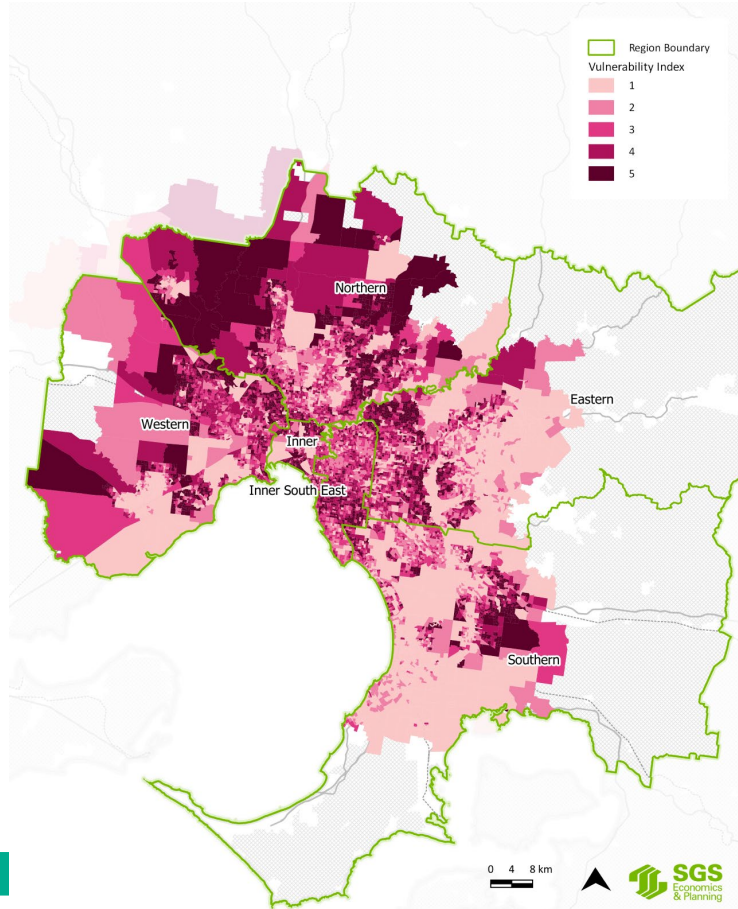
Study area limited to urban areas (ABS urban centres and localities) and by data availability

Region	Tree Canopy Cover 2014 (ha)	Tree Canopy Cover 2018 (ha)	Tree Canopy Loss/gain 2014 - 2018 (ha)	Tree Canopy Cover 2014 (%)	Tree Canopy Cover 2018 (%)	Tree Canopy Percentage Point Change 2014 - 2018
Inner	915	981	65	11.8%	12.6%	0.8%
Inner South East	2,952	2,821	131	18.3%	17.4%	-0.8%
Western	2,206	2,573	367	5.0%	5.8%	0.8%
Northern	6,180	6,546	366	11.0%	11.7%	0.7%
Eastern	13,103	11,900	1,202	24.9%	22.6%	-2.3%
Southern	7,625	7,474	151	11.7%	11.5%	-0.2%
<b>Metro wide (Total)</b>	<b>32,980</b>	<b>32,295</b>	<b>686</b>	<b>13.6%</b>	<b>13.4%</b>	<b>-0.3%</b>

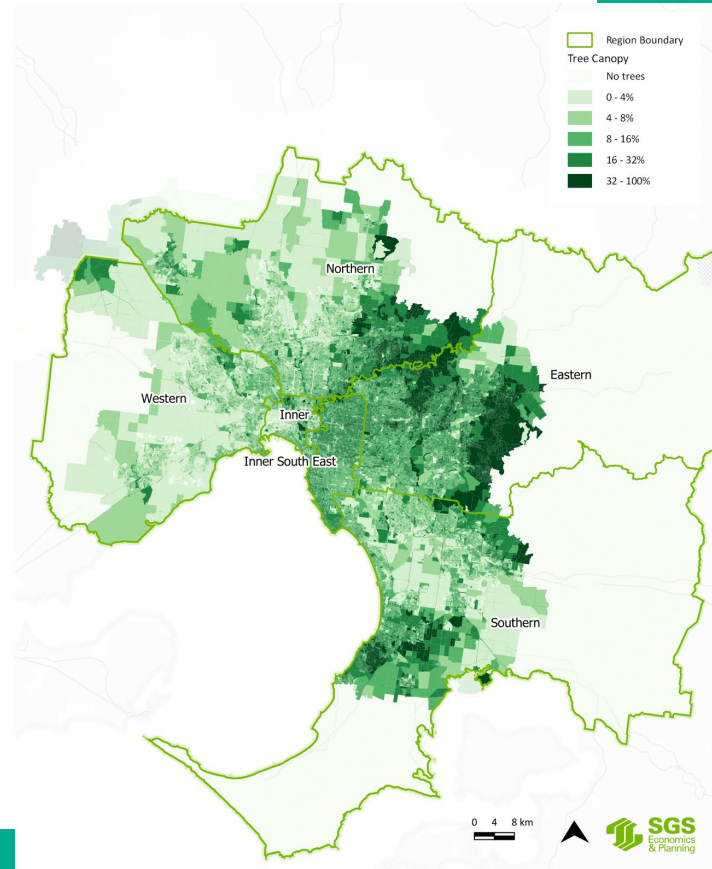
## Change in tree canopy cover, 2014 to 2018



# GROWTH AREA CHALLENGES



Heat vulnerability, 2014



Tree canopy cover, 2018



# IMPROVING DELIVERY OF ENVIRONMENTAL INFRASTRUCTURE

## Open space

- Improve existing open space
- Open up publicly-owned land to public access
- Finally, consider adding new spaces

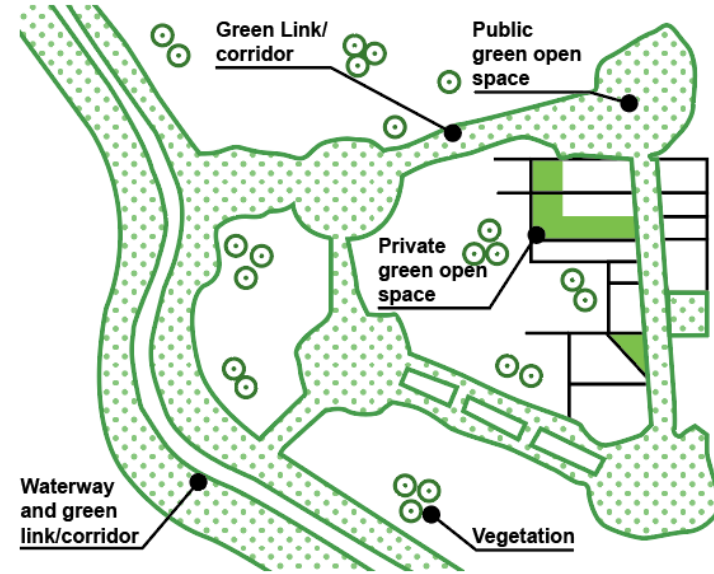
## Target open space connectivity

- Interconnection is a long-standing Victorian Government policy goal
- Pay extra attention to neglected areas or convertible land, such as surface car parks, or school grounds
- Tree coverage on streets can provide connections

# OPEN SPACE CONNECTIVITY



Fisherman's Bend Urban Ecology Study



Interconnected open space network



# IMPROVING DELIVERY OF ENVIRONMENTAL INFRASTRUCTURE

## Open space contributions

- Review and add connectivity as an objective

## Offsetting vegetation removal

- Existing trees retained during land development could be counted towards achieving canopy cover targets on private land

## Government funding

- Open space analysis and strategies
- Tree planting on public land
- Upgrading water supplies

## Commercial uses of open space

- Opportunities to add cafés and other facilities to help fund open space improvements and purchases for connectivity e.g. Royal Botanic Gardens' outdoor summer cinema



# DRAFT 30-YEAR STRATEGY RECOMMENDATIONS

- Target 30% tree canopy coverage in new growth areas  
Achieve 30% tree canopy coverage in new growth areas by mandating coverage during precinct development. Fund relevant Victorian Government agencies and local government to plant, replace and maintain canopy trees
- Develop an interconnected open space network  
Immediately provide direct funding, and reform the developer open space contribution scheme, to create an interconnected open space network and extend Melbourne's urban tree canopy

# — FIND OUT MORE

To view the draft strategy, visit

[www.infravic.com/30yearstrategy](http://www.infravic.com/30yearstrategy)

A close-up photograph of several vibrant green leaves, likely from a tree or shrub, covered in numerous small, glistening water droplets. The leaves are layered, creating a sense of depth and texture. The lighting is soft, highlighting the veins on the leaves and the individual droplets.

thank  
you