

Submission form: Victoria's draft 30-year infrastructure strategy

Your details

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About you

Please tell us which best describes you:

☒ Victorian resident
☐ Victorian business owner/operator
☐ Industry professional
☐ Community organisation representative
☐ Local government representative
☐ State government representative
☒ Researcher
☐ Other (please specify): Click or tap here to enter text.

Your focus areas

Select the topics or regions you are providing feedback on (select all that apply):

Topics	Regions
☐ Across sectors	☐ Regional Victoria
☐ Circular economy	☐ Urban growth areas
☒ Cities	☒ Melbourne
☒ Climate change	
☐ Community infrastructure	
☐ Education	
☐ Energy	
☐ Freight	
☐ Health	
☐ Housing	
☐ Infrastructure for Victoria's First Peoples	
☐ Transport	
☐ Water	

Your feedback

Add as many sections as you need to provide all your feedback in this submission.

Topic/area:	A thriving natural environment
Recommendation name:	Better use government land for open space and greenery
Recommendation number:	26
1. Do you support this topic or recommendation?	☐ Yes ☐ No ☒ In part
2. Tell us why	Click or tap here to enter text.
3. Share any supporting evidence or examples	https://www.nature.com/articles/s41467-024-53402-2 https://www.pnas.org/doi/10.1073/pnas.1817561116 https://www.abc.net.au/news/2024-11-07/tree-canopy-cover-urban-heat-island/104567914
4. Include proposed changes and improvements	Click or tap here to enter text.

Overall comments

- I suggest that open space and tree canopy are handled as separate recommendations; these are quite different in terms of the actions required. Open space expansion requires governance changes that unlock land and enable its maintenance, whereas tree canopy is contingent on investment in capital works to retrofit residential streets and public spaces at large scale. If no new recommendations can be proposed, I'd suggest that tree planting is shifted to Recommendation 27 and given a dedicated subsection (R27 is a bit weak on the use of greenery as climate adaptation infrastructure at the moment).
- While I note the State is not in a strong financial position, this allocation of funds is simply far too low to deliver the proposed outcomes. Greening is much cheaper than building tunnels or railways, but it's still got costs that this Plan does not offer resources to meet. Given the very modest financial capabilities of LGAs, this Plan must show financial leadership in this space.

Open space

- Opening up existing state land as open space is promising, but it is not clear that this will actually be near the areas that open space is needed, particularly in infill areas. Plans to create new open space for densifying areas need more substance; for example there may be scope to fund park creation through developer contributions that either support property acquisitions to create parks, or fund road-to-park conversions like those that have been quite successful at creating small parks in local areas (e.g. Otter Street Reserve, Cambridge St Reserve, both in Collingwood).
- Unlocking state land may require significant investment to make it suitable for use as parkland. This should be factored into the recommendation and its costing. Improving hundreds of hectares of land will cost considerably more than the \$10-15m contemplated by this draft.

Canopy

- It's reasonable to set canopy targets again, especially in a way that accounts for the likely decline of private-land canopy, but I'd be wary of this becoming a time sink or delay on canopy expansion actions in the short term. I'd encourage this to be completed quickly and for immediate actions to continue in the interim while target-setting proceeds. Most municipalities already have established targets at local level, and Plan Victoria's 30% target is also acceptable (as a bare minimum). There's also good science on this topic, my favourite being the work of [Ziter et al. \(2019\)](#) which shows that air temperatures were significantly reduced during heatwaves when canopy around a house (in a radius of 60-90m) exceeded 40%. This target would require quite high street canopy in areas that do not have much private canopy; for example, if private property forms half of all land cover in a suburb, and it's got 10% canopy, then the public realm needs 70% canopy to achieve an overall result of 40%. The vast majority of public land is streets, so most of the change needs to be in streetscape canopy. This is absolutely possible - and would be a great result for the state - but it would be very difficult under current policy settings and with existing levels of investment.
- It's really commendable that more regular monitoring of canopy is proposed. Our data is now badly out of date (2018) and a more regular collection of this data will be valuable in tracking trends as planting (and infill growth) proceeds.
- It's good that this recommendation acknowledges the increased role of public land in providing canopy. However, the Plan must acknowledge that achieving overall canopy levels that are safe and healthy with public land will require a large scale, systemic rollout of tree planting in streets (which form the vast majority of public space). This work will need to be at the scale of an important state infrastructure project, and costed accordingly; indeed, it is an important rollout of badly-needed green infrastructure for public health and amenity.
- Funding is a critical aspect of this green infrastructure rollout. Street planting often involves excavation, and will increasingly require removal of asphalt as we re-balance the allocation of space in streets between greenery and parking/traffic. Doing this at an effective pace needs funding for capital works at a scale that local governments simply cannot provide; for example, a street tree can easily cost \$2000 to plant in an established street, in a way that it has good prospects of growing large and healthy. Planting 1000 street trees in each LGA, each year, would be a good step towards achieving canopy targets in a limited subset of heat-vulnerable locations; it'd also cost \$2m per LGA, annually, just in capital costs. \$62 million per annum for a street tree program, just in Melbourne's 31 LGAs, would be a big increase on past spends, but it's also a tiny fraction of many of the other infrastructure expenditures contemplated in this Plan and is well worth consideration, particularly given the likely avoided costs in terms of the human health impacts (e.g. lower rates of heatwave mortality and morbidity, more walking and cycling, lower flood risks etc).
- A final enabling aspect that could be included in this plan for Recommendation 26 is a systematic re-balancing of regulations and policies that currently provide strong rights to utility and traffic infrastructure, often excluding trees with large offsets from pipes and roads/parking spaces, and/or requiring severe pruning of trees. In many instances these rules are excessively precautionary, and serve to create more severe risks to the community (by excluding trees) than the risks they hope to mitigate. Achieving a large-scale rollout of tree planting – particularly in built-up areas – requires trees to have more balanced rights in instances where their growth may take place near roads, parking spaces, cables or pipes.

