



To: Infrastructure Victoria
Email: enquiries@infrastructurevictoria.com.au

Re: Draft Victoria's Draft 30 year Infrastructure Strategy

We are a grassroots Incorporated group of citizens in the municipality of Merri-bek in Melbourne's Northern suburbs active on climate advocacy since 2008. We bring our experience and knowledge of climate science and the need for rapid decarbonisation to address the climate emergency, especially as it applies to our own municipality, but also generally for Victoria and Australia as a whole.

We have had representatives attend four UN Climate Change Conferences since COP21 in Paris in 2015 as NGO Observers.

We thank Infrastructure Victoria for this opportunity to put in a submission on the Victoria's Draft 30 year Infrastructure Strategy. Most of our comments are made through a climate lens with a particular focus on the northern suburbs of Melbourne.

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for and on behalf of Climate Action Merri-bek

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Submission: Draft Infrastructure Strategy

Executive Summary and recommendations

There was much we strongly supported in the Draft Infrastructure Strategy. Here are some of the highlights:

1. Addressing the housing crisis is important, and we have made suggestions for improving social housing infrastructure..
8. The proposed tram extension: Melville Road to Batman train station in Coburg does not make sense in increasing the catchment capacity. We suggest extending the tram line to Glenroy Station instead.
14. We fully endorse updating “speed limit policy and work with local governments to update speed limit signs to set 30km/h limits
15. We note the strong benefits gained from investing in walking and cycling infrastructure.
16. Generally agree with sharing school sports grounds for community use. Upgrade of the sports grounds, whether they are Council managed or in schools, should avoid going down synthetic turf conversion pathway.
24. Reducing Greenhouse gas from Infrastructure. We wholeheartedly support this approach, especially during procurement contracts for infrastructure.
32. Determine long duration energy storage needs and technology
34. Speed up household energy efficiency and electrification. Does not deal with the position of renters. We have some suggestions
38. Prepare for more recycling and waste infrastructure but we highlight Waste to Energy is inconsistent with a Circular Economy and contains environmental and health risks.
42. Encourage off-peak freight delivery in urban areas should be considered as only one solution. Micro logistics hubs and e-cargo bike delivery should also be considered for urban last mile delivery.
43. Extend metropolitan trains to growth areas in Melbourne’s north and south-east. We have major problems with the timing and detail for upgrading the Upfield Line and suburban extension. We think duplication and extension to Craigieburn should be moved forward in priority to be done in the next 5 years. Followed by extending the suburban electrified rail to Wallan, not Kalkallo. The politicians are already bidding for upgrading the Upfield Line. Current State politicians have promised a 70% increase in capacity when Metro tunnel opens in 2025.

Submission

Victorians have good access to housing, jobs, services and opportunities

1 Build more social housing

Consistently invest in new social housing to provide more Victorians on low incomes with access to a secure and affordable home.

We suggest that investment in social housing should include government owned housing located near activity centres and public transport that is rented out to government employees and emergency workers such as teachers, police, nurses, to encourage their location close to their work.

The public Housing towers in this time of housing crisis should not be demolished and housing redeveloped, but be retrofitted to bring them up to adequate standards.

Government land should not be handed over to private developers to build a mix of social and private housing. This land should be kept in public hands and social and public housing developed, with the developer playing the role of a housing contractor/ builder to the government.

2 Facilitate markets and invest in kindergarten infrastructure

Facilitate markets for private and not-for-profit investment in kindergarten infrastructure. Share regularly updated information about the demand for and supply of kindergarten places. Publish priorities for government investment to deliver kindergartens in communities that will have the greatest need.

Encouraging provision of not for profit kindergartens is particularly important

3 Plan and deliver expanded and new schools

Identify schools to expand and confirm areas that will need new schools. Fund expansions of existing schools and begin delivery of new schools. Minimise costs by expanding the built capacity of existing schools and building larger new schools.

Agree

4 Expand TAFE in Melbourne's growth areas and some large regional centres

Expand TAFE campuses in Melbourne's west, north and south-east growth areas, and some large regional centres, to train more students to fill skills gaps, especially in construction, energy and health.

New TAFE campuses offering trade and business courses that are needed by the local community is especially important

5 Build libraries and aquatic centres for Melbourne's growing communities

Fund councils to plan and build libraries and aquatic recreation centres in Melbourne's growth areas.

Libraries are important for community social cohesion, and provides resources for learning. This is important for new residential areas such as in Melbourne's northern suburbs.

New Libraries should also be setup to operate as local emergency centres when needed during times of disaster such as floods, bushfires, heatwaves, including with their own solar panels and battery power to sustain them during disaster.

Leisure Centres also provide a community focus and enable learn to swim classes to provide people with water safety skills. New Leisure Centres should avoid gas and be all electric, using industrial grade electric heat pumps.

Provision of public meeting rooms, and shared location of facilities is also useful as noted.

6 Make government infrastructure more accessible

Complete priority public transport stop upgrades to meet legal accessibility requirements and fund further upgrades. Provide better public information on accessibility in government Buildings.

We note the importance of upgrading tram stops. Here in the northern suburbs upgrading the no 19 tram along Sydney Road we think is an important priority and should be done before the second round of level crossing removal is embarked upon on the Upfield Rail Line in Brunswick.

We think the installation of accessible tram stops on Sydney Road would also enable a reconfiguration of Sydney road to make it safer for cycling, provide more footpath space and space for tree plantings to provide canopy shade to address the growing urban heat in that corridor that stretches from Park street to Bell street. This would enliven the heritage streetscape and add to the liveability and environmental sustainability of this iconic shopping strip. There are already a substantial number of private and Council owned car parks off side

streets to cope with loss of street parking. Parallel parking often contributes to the congestion on Sydney Road. The changes could also prioritise movement of trams on Sydney Road, to provide a more efficient service.

7 Rezone locations near existing infrastructure for more home choices

Change all relevant planning schemes to rezone for more homes in Victoria's cities and reach housing targets. More homes should be close to public transport and open space, with good access to services.

We agree with the principle of more compact cities. But local consultation and engagement is also important to get the development balance right. Development approval needs to be done with transparency with positive sustainability outcomes that is also sensitive to the surrounding community. The local Council needs to be part of this process in negotiating development outcomes.

Future option: Mandate more affordable homes near existing infrastructure

Choose a mechanism to mandate more housing that is affordable for low-income households and close to public transport, open space and services.

Private development should need to establish 30% social housing as part of developments close to public transport, open space and services.

Build to rent for long term rental agreements should also be mandated near existing infrastructure. Rents should be controlled or capped to a percentage of the renters income.

Future option: Phase out residential stamp duties

Over the long term, phase out residential stamp duties and phase in residential land tax.

Agree in principle.

8 Extend Melbourne's trams to encourage more new homes nearby

Increase services on key tram routes in activity centres that have been designated for additional housing development. Complete a detailed assessment of tram extensions in Melbourne's established suburbs. Start building extensions in areas that can support more new homes. Rezone land around the extended tram lines so more homes are built.

We will comment on one proposed tram extension: Melville Road to Batman train station in Coburg.

We don't understand the rationale in the proposal to take the tram to Batman station, and this would minimise its population catchment.

We think the No 58 tram line should be extended from its existing terminus at Bell Street, up Turner and Derby streets, then along Boundary Road. We note that there are generous verges for most of Boundary Road. From Pascoe Street there are a couple of route options to take the tram to Glenroy station for a terminus: West Street and Glenroy Road, or Rhodes Parade and Plumpton Avenue.

The original tram route plans in the 1940s were to extend the tram line as far as Boundary Road in Hadfield.

The advantage of extending the tram to Glenroy station, rather than Batman Station, is that it would provide public transport tram service to a much greater number of people in Pascoe Vale, Hadfield and Glenroy, and would enable more medium density infill developments along its route. It would connect schools and shopping activity centres (such as the West street shops) to Glenroy station and the city.

9 Run faster bus services, more often, in Victoria's largest cities

Run buses more often, for longer hours, and give buses priority on the road. In stages, straighten out existing bus routes so they are fast and direct.

Support

10 Build a new bus rapid transit network

Complete a detailed assessment, reserve the required land, and build a new bus rapid transit network. Start with routes that connect train stations and busy destinations in Melbourne's north, west, and south-east, and extend the new Eastern Busway along Hoddle Street.

Support

11 Extend metropolitan trains and run more services in Melbourne's west

Extend and electrify metropolitan trains to Melton. Reallocate trains that serve Melton to other areas in Melbourne's west and regional Victoria. Assess delivery of a new train station at Altona North accompanied by land rezoning.

Fully agree with extending suburban rail to Melton

12 Run more bus and coach services in regional Victoria

Deliver more bus services in regional cities. Run more V/Line coach services to better connect small towns to regional cities. Start with routes that improve access to jobs, education and Healthcare.

Support

13 Make off-peak public transport cheaper and simplify regional fare zones

After upgrading the myki ticketing system, charge lower fares for off-peak travel on Victoria's buses, trains and trams. Simplify fares and reduce the number of regional fare zones.

Support

Victorians are healthy and safe

14 Make local streets safer for children and communities

Reduce speed limits to 30km/h on local streets, starting in places that children often visit including around schools, playgrounds, childcare centres and kindergartens.

We fully endorse updating “speed limit policy and work with local governments to update speed limit signs to set 30km/h limits, starting with local streets around places that children often visit.” This will reduce deaths and injuries, but also make our streets safer to walk and cycle. Updating the street landscape also assists with changing behaviours.

15 Build safe cycling networks in Melbourne and regional cities

Continue building protected and connected cycle corridors across Victoria. Publish updates to the strategic cycling corridor network.

We note the strong benefits gained from investing in walking and cycling infrastructure. “For every \$1 invested in walking and cycling infrastructure, the community receives \$13 in health, economic and environmental benefits.³⁶³ Investing in walking and cycling can reduce noise and pollution while lowering the risk of conditions like heart disease, stroke and diabetes.³⁶⁴ By encouraging healthy lifestyles, infrastructure can help reduce demand on public hospitals.”

Victoria's strategic cycling corridor plan is a useful point to start.

Failure to build cycling infrastructure as part of Major Transport Projects

We note that cycling and walking infrastructure should be built as part of major transport infrastructure projects under the Transport Integration Act. But these builds don't always occur and we offer these examples:

- Camp Road Level Crossing Removal in Campbellfield the cycling paths were on the plans but never implemented. In fact LXRP cemented signal cabling on the portion of the rial bridge over the M80 that would be allocated to pedestrians and cyclists and erected fences and locked gates to stop access between the Western Ring Road Trail and Camp Road. A very easy shared use path to implement was stymied.
- In the widening of the M80 between Edgars Road and Sydney Road, Hume Council had requested a link path from the end of the Merri Creek Trail to a Council owned road, to facilitate a link north to Bolinda Road Reserve and the trail through Marram Baba Parklands north. The request was denied. Cyclists need to detour instead along Sydney Road in Campbellfield or a very circuitous route using the Galada Tamboore path.
- VicTrack upgraded all the signal cabling between Gowrie and Upfield station using trench diggers. They could have easily come along afterwards and installed a concrete path in this strategic cycling corridor. But didn't. There is no safe north south cycling route through Campbellfield with cyclists often using the footpaths on Sydney Road or risking death in the high volume traffic in a 70km per hour zone.

Upfield Bike Path Extension.

We also note intransigence by the Department of Transport. The link between the Upfield Bike Path and the Western Ring Road Trail has long been identified as important to complete. Pascoe Vale MP Christine Campbell raised this in 2013. Broadmeadows MP Frank Maguire actually succeeded in getting state government funding for this project in the 2018 budget. Moreland (now Merri-bek) Council prepared in early 2018 preliminary shared path designs in the rail easement along Sages Road, with minimal loss of car parks.

Sages Road is a bus route with a bus terminus, and has factories with semi-trailers and trucks loading and unloading using forklifts, plus also has a site for large cranes for hire or lease. Vic Roads has proposed reducing the speed limit to 40km/h and making Sages road a shared use zone as part of the Upfield bike path. We honestly couldn't believe this proposal. There is no way we would trust an 8 or 10 year old to cycle on VicRoads proposed 'Upfield Bike Path' shared zone like this.

The other obstacle always put forward is difficulty with negotiating with Metro trains for use of the rail easement, especially between the end of Sages Road and the Western Ring Road Path.. Come on. The Department of Transport advised Stage 2 works would be underway in 2024,¹ but no work has been started as of May 2025.. This project has been funded for 7 years. Time for the government to push this through, at Ministerial level if necessary.

Extension of the Upfield Path to Wallan

We also note local communities demanding duplication of the Upfield rail line to increase frequency of service, and its extension to Upfield and eventually to Wallan. As part of this extension the Upfield bike path should be extended all the way to Wallan.

Maram Baba Parklands and extension of the Merri Creek Trail

¹ Department of Transport, Upfield Shared Use Path - extension and refurbishment works
<https://transport.vic.gov.au/news-and-resources/projects/upfield-shared-use-path---extension-and-refurbishment-works>

We also note the declaration of regional parklands, and in the northern suburbs this includes Maram Baba parklands that follows Merri Creek. The Merri Creek Trail is popular with walkers and cyclists. Extending this trail further north following the creek makes enormous sense. At the moment the Merri Creek Trail stops under the M80 bridge over the Merri Creek. Hume Council had a plan to connect this up to Bolinda Road Reserve through a connecting path in the road easement to a local Council Road, but their request was rejected. A path following Merri Creek north from the M80 should be a priority in the Maram Baba parklands, to connect with the existing path near Bolinda Road Reserve.

Climate Science recommends shift in transport behaviour

The IPCC 6th assessment reports have highlighted that encouraging shift in transport behaviours with greater adoption of walking and cycling is one of the largest actions to reduce personal carbon footprint that can be achieved.²

Funding Strategic cycling network

Funding for specific cycling infrastructure in the past has been for \$100 million over 4 years, an average of \$25 million a year. While we would welcome increased funding commitment for the strategic cycling network of \$400 million to \$600 million over 10 years, this is still far short from what is needed.

As an example of the low level of funding, According to the budget papers the Victorian Budget 2018/19 includes almost \$4.3 billion for upgrading or new roads around the state which is 69.1 percent of transport infrastructure budget funding. The overhaul of Victoria's public transport network will get \$1.9 billion which is 30.5 percent of Transport infrastructure budget funding. In comparison, and a long way behind, the active transport budget for cycling and walking is just 0.36 per cent of the total transport infrastructure budget.

In 2019 the transport infrastructure investment total (not including Victrack investment) was \$46.9 billion. Of this amount the proportion allocated was:

- Roads 68.9 per cent;
- public transport 28.6 per cent (including level crossing removal);
- road safety, boating, a new St Kilda pier, Carrum promenade revitalisation 2.3 per cent;
- and Cycling just 0.175 per cent

For the 2023 State Budget, Spending on cycling / active transport as part of new capital works as a proportion of transport project funding is \$36.3 million or 0.42% of the transport budget. Including a generous estimate of projects delivered as part of major transport projects, the percentage funding of the transport budget is still likely to be between 1% and 2% for active transport.

² Dr Valérie Masson-Delmotte, as quoted by Extend the Upfield Bike Path Blog, (4 June, 2022) What does the IPCC 6th assessment climate report say on cycling, and addressing local Melbourne transport mode shift, <https://upfieldbikepath.wordpress.com/2022/06/04/what-does-the-ipcc-6th-assessment-climate-report-say-on-cycling-and-addressing-local-melbourne-transport-mode-shift/>

We note that in the past Bicycle Network's budget submission to the Victorian government requested the establishment of a \$126 million annual bike infrastructure fund, the equivalent of investing \$20 per person, per year into bikes annually.

The United Nations Environment Programme has recommended that countries should invest at least 20 per cent of their transport budget in walking and cycling infrastructure to save lives, reverse pollution and reduce carbon emissions

London has also committed to invest \$23 per person on active transport.

We think the State Government should aim to increase active transport funding to 20% of the transport budget. This should probably occur in a phased approach.

16 Help government schools share their grounds

Prioritise which government school sports fields and facilities could deliver the greatest benefits if they were shared with local communities outside school hours. Give these schools extra help for maintenance if they voluntarily share their grounds outside school hours. Offer funding for upgrades to incentivise shared access outside school hours.

Generally agree with sharing school sports grounds for community use. Upgrade of the sports grounds, whether they are Council managed or in schools, should avoid going down synthetic turf conversion pathway.

At the very least there should be a triple bottom line assessment of all benefits, costs and impacts including environmental and health risks. Merri-bek Council has developed a Sports Surface Policy as part of its good governance, but there has been poor governance by most Council and poor guidance and governance at the state level regarding use of synthetic turf in public places and its contribution to microplastics pollution and other possible environmental and health impacts. Synthetic turf sports fields also restricts use, so is not compatible with a multi-use community scenario.

Note: The image on Page 60 used of people relaxing on a synthetic turf sports surface sends the wrong message of endorsing this surface. All Synthetic turf, up until recently, likely contains PFAS forever chemicals.³ It adds to urban heat. As it wears microplastic particles are washed away into the stormwater system into creeks, as well as becoming airborne. This poses a growing environmental risk and risk to human health.⁴ Recent research found that airborne microplastic particles are absorbed by plant leaves providing a pathway for microplastics into the human body from food.⁵

³ UMASS Lowell, PFAS in Artificial Turf

<https://www.uml.edu/research/lowell-center/athletic-playing-fields/pfas-in-artificial-turf.aspx>

⁴ See John Englart, April 2021, Literature Review: Synthetic Turf carbon footprint, environmental, health, microplastics and biodiversity impacts

<https://takvera.blogspot.com/2021/04/literature-review-synthetic-turf-carbon.html>

⁵ Nature, 9 April 2025, Leaf absorption contributes to accumulation of microplastics in plants, <https://www.nature.com/articles/s41586-025-08831-4>

Please see our submission to the Federal PFAS Senate Inquiry.⁶

We have presented in-person to the Victorian Parliamentary Inquiry on Climate Resilience and argue there has been a lack of governance on use of synthetic turf in Victoria.⁷

17 Invest in maintenance, upgrades and expansions of community health facilities

Develop and fund 5-year priorities for Victorian Government investment in community health Facilities.

Support.

18 Build more residential alcohol and other drug treatment facilities

Plan and start building residential rehabilitation and withdrawal facilities to meet the demand for alcohol and other drug treatment.

Support. We need to approach drug addiction and care as a health issue. This benefits addicts and the community in the long run,

19 Invest in digital healthcare

Expand digital healthcare to improve the quality of care and ease demand on public hospitals.

Deliver a statewide medical image sharing system and a statewide virtual care service that remotely monitors suitable patients at home.

Support. This can deliver healthcare and save costs.

20 Upgrade critical public hospital infrastructure

Define the scope and timeframes to upgrade the Royal Melbourne Hospital and begin the first stage of construction. Continue with upgrades at the Alfred and Austin hospitals.

Support.

⁶ Climate Action Merribek submission to the Senate Inquiry on PFAS
<https://climateactionmerribek.org/wp-content/uploads/2024/11/20241115-submission-senate-inquiry-on-pfas.pdf>

⁷ Victorian Parliamentary Inquiry into Climate Resilience, 6 November 2024, Public hearing with Natural Turf Alliance
<https://www.parliament.vic.gov.au/495e25/contentassets/e8a04ba50bdd47ebb50a00a1edc2496d/2.-final-natural-turf-alliance-06112024.pdf> See also Climate Action Merribek submission No 197
https://www.parliament.vic.gov.au/4ae815/contentassets/388ceb628e11495582deca2ae9cbd3a2/submission-documents/197.-climate-action-merribek_redacted.pdf

21 Better use prisons and invest more in health facilities and transition housing

Use prison capacity to move people to facilities that meet their needs. Invest more in prison health facilities and post-release transition housing. Close old prisons that are underused and expensive to keep.

Support

Aboriginal people have self-determination and equal outcomes to other Victorians

22 Invest in secure homes for Aboriginal Victorians

Fund a 10-year program to build social homes for Aboriginal Victorians and provide secure and sustainable tenancies. Work with Aboriginal housing providers and Traditional Owner corporations to develop capacity across the Aboriginal housing and homelessness sector.

Support

23 Fund better health and wellbeing infrastructure for Aboriginal Victorians

Fund and start health and wellbeing infrastructure projects for Aboriginal Community Controlled Organisations (ACCOs). Provide additional annual funding to further develop the skills and capacity of health and wellbeing ACCOs to plan, develop and deliver new and upgraded infrastructure in a self-determined way. Establish an interim fund for minor works and repairs until a self-determined perpetual infrastructure fund is introduced.

Support

Victoria has a thriving natural environment

24 Reduce greenhouse gas emissions from infrastructure

Adopt carbon values and measure carbon in infrastructure projects to reduce emissions.

We wholeheartedly support this approach, especially during procurement contracts for infrastructure. Government contracts for using Low carbon cement can work to bring down the price so that it is more widely used. In our submission on Level Crossing removal at Coburg in 2018 we argued that low carbon footprint materials used in construction, and for Inclusion of water sensitive urban design, energy efficiency and solar PV.⁸

⁸ Climate Action Merri-bek submission, August 2018, Submission: Assessing Level Crossing Removals in Coburg through a climate change prism

25 Advance integrated water management and use more recycled water

Work with partners to fund and deliver integrated water management projects. Determine the costs and benefits of introducing recycled drinking water in Melbourne and Geelong and build a pilot recycled drinking water facility. Deliver a community education campaign on the need for more water sources.

Integrated Water Management is important, along with a diversity of drinking water sources. We also need to consider conservation of water in urban areas.

The Millenium drought placed great stress on parkland, grass sports fields and urban trees with water restrictions and (wrongly) encouraged rollout of synthetic sports fields. Since then Councils have invested in stormwater harvesting and storage projects to provide water for sports fields irrigation. We need to be aware that living grass provides environmental services, even during a drought, and should be at least trickle watered for its survival and maintain our urban liveability. Advanced integrated Water Management is important for Water Sensitive Urban design in maintaining environmental sustainability.

Future option: Plan for and invest in manufactured water

Plan for and invest in manufactured water. Return more water to Traditional Owners and the Environment.

Support. We should also be aware that logging in catchments has a long term impact on the amount of water those catchments supply. New Trees soak up more water. They are also more flammable for their first 50 years. Logging native forests may have stopped, but we will still have reduced water from those logged catchments for many years.⁹

26 Better use government land for open space and greenery

Fund actions to better connect open spaces to each other and plant more trees and shrubs in urban areas. Give Victorians access to more public land in fast growing suburbs. Target at least 30% tree canopy and shrub cover on public land.

Support: State Government should set targets for Melbourne's established suburbs using Living Melbourne's target of 30% to 50% land covered by tree canopy and shrubs by 2050. Also agree on setting targets for regional cities based on their greening strategies. Targets are most useful when they measure progress. The government should collect vegetation data so it can show how it is meeting its targets each year.

<https://climateactionmerribek.org/2018/08/09/submission-assessing-level-crossing-removals-in-coburg-through-a-climate-change-prism/>

⁹ See Lindenmayer and Taylor (2018), Logging must stop in Melbourne's biggest water supply catchment

<https://theconversation.com/logging-must-stop-in-melbournes-biggest-water-supply-catchment-106922>

We recommend that the Planning Department urgently update Cooling and greening Melbourne map with a current dataset for urban heat, vegetation cover, heat vulnerability index. This currently has data for 2014 and 2018.

On Measurement of Progress: We note that the Victorian Planning Department have comprehensive datasets for 2014 and 2018 for the Cooling and greening Melbourne map which brings together vegetation cover, urban heat, and the heat vulnerability index.¹⁰

We think this planning tool needs urgent updating with a current dataset. This assists communities, Councils, Businesses and individuals with planning for local communities. Many decisions depend on access to good data. The failure to upgrade this data in 2022 to provide a third trend point appears to be a failure of governance.

Victoria is resilient to climate change and other future risks

27 Better prepare infrastructure for climate change

Fund high-priority, cost-effective infrastructure adaptation actions when climate adaptation action plans are updated in 2026. Produce an energy sector adaptation plan.

Strongly support

28 Use new flood maps to revise planning schemes

Produce a common set of flood projections based on the latest climate data. Use this information to update flood studies and maps and apply them in planning schemes. Minimise building in areas at high risk of flooding.

New flood maps are important. Merri-bek Council have been working on updated flood mapping and engaging with affected property owners for a number of years. This also informs Council Integrated Water Management Strategy, and enables priority for upgraded drainage works as part of capital works improvement.¹¹

29 Coordinate faster delivery of key energy infrastructure

Fast-track key energy projects and coordinate enabling infrastructure. Establish a unified

¹⁰ See Victorian Planning Department, Cooling and greening Melbourne map <https://www.planning.vic.gov.au/guides-and-resources/Data-spatial-and-insights/cooling-andgreening-melbourne-map>

¹¹ Climate Action Merri-bek, 11 July 2024, Flood Risk climate impacts: 12,000 Merri-bek properties at stormwater flood risk due to Climate Crisis <https://climateactionmerri-bek.org/2024/07/11/flood-risk-climate-impacts-12000-merri-bek-properties-at-stormwater-flood-risk-due-to-climate-crisis/>

energy transition project pipeline and conduct annual progress assessments. Create a central energy transition coordinator to align priorities, improve transparency and manage risks.

Strongly support

30 Improve environmental assessments and site selection for energy projects

Reform environmental assessments and help energy project proponents select good sites.

Sounds good in theory, but in practice it can allow projects to start that carry major environmental and/or health risks.

I note the Planning Minister rejection of an Environment Effects statement for Waste to Energy plants, directing them to an EPA development licence process. This forces concerned members of the community to read and engage with a large amount of Development information, much of it highly technical. As these projects involve handling toxic waste and pollution, an EES should have been ordered for each plant proposed.

Some reform may be needed, but it should be transparent and ensure environment and health risks are adequately considered.

31 Invest in home, neighbourhood and big batteries for more energy storage

Create new support for home batteries and provide incentives to encourage people to join a virtual power plant. Expand the neighbourhood batteries program, or similar. Facilitate more investment in big batteries for the transmission network.

Strongly Support encouraging rollout of more residential batteries, neighbourhood batteries and grid scale batteries.

32 Determine long duration energy storage needs

Determine the most efficient policy or investment options to provide enough long duration energy storage to meet Victoria's needs.

Strongly support investigation and research into long duration energy storage, including long duration battery technologies.

My understanding is pumped hydro power is a low cost energy source and research has already been done on available sites around Australia.¹²

¹² See ANU, Pumped Hydro Energy Storage Atlases
https://re100.eng.anu.edu.au/pumped_hydro_atlas/

Another option may be renewable hydrogen for long duration energy storage, ideally stored close to where it is produced and used.¹³ Perhaps Portland might be a good location near the Aluminium smelter.

33 Develop regional energy plans, guide transition from fossil gas and maintain reliable gas supply

Develop an energy plan for electrification and gas use that meets each region's needs and prepare gas infrastructure decommissioning for homes and some businesses. Secure gas supplies to meet demand. Set a renewable gas target and support renewable gas production.

Agree that we need to encourage gas reduction in residential and commercial use through electrification.

Use of biomethane and renewable hydrogen need to be explored for replacing gas in industrial use.

Refining the Gas Substitution Framework is important.

Introducing a renewable gas production target that can support industry and power supply is positive.

34 Speed up household energy efficiency and electrification

Require efficient electric space heating and hot water when people replace their heaters at end-of-life and support low-income households to go all-electric. Complete social housing energy upgrades, including electrification. Require Victorian homeowners to disclose the energy efficiency of their homes at the time of sale or lease.

Strongly Support these initiatives.

The draft identifies supporting social homes and renters. But there is little follow through in how to support renters to increase energy efficiency or to get the Landlord to electrify/upgrade appliances without also increasing rents in a tight housing market where cost of living is already a huge concern.

In February 2025 we signed on to the Healthy Homes for Renters joint statement to the Federal Government.¹⁴ Some of the measures should be implemented at the state level, including:

¹³ Various review articles from Science Direct (2015) Hydrogen Energy Storage.

<https://www.sciencedirect.com/topics/engineering/hydrogen-energy-storage>

¹⁴ Climate Action Merribek, 14 February 2025, Fighting High Energy Bills for Renters: A Call to Action <https://climateactionmerribek.org/2025/02/24/fighting-high-energy-bills-for-renters-a-call-to-action/>

- Establishing one-stop-shops to help landlords implement home energy upgrades, through access to advice, finance options, and tradespeople.
- Conditional and targeted funding and financing options could be offered to assist landlords in meeting new energy performance standards, coupled with stronger protections for renters, ensuring landlords cannot pass upgrade costs onto tenants through excessive rent increases.
- Mandatory energy performance disclosure, so renters know the efficiency of a home before they sign a lease.

Victoria has a high productivity and circular economy

35 Prepare and publish infrastructure sector plans to shape Victoria's cities

Agree a set of assumptions for future population, jobs and land use for more compact cities. Require each department that owns infrastructure to develop an infrastructure sector plan as soon as possible, based on these assumptions, and publish strategic-level plans. Use the finished sector plans to decide infrastructure project funding.

Agree. But keeping documents secret, such as the 2018 \$5m Somerton Link Report, goes against transparency needed for decision making based on Sector Infrastructure Plans.

36 Reform infrastructure contributions

Simplify Victoria's infrastructure contribution schemes to cover all types of housing developments and reflect the cost of infrastructure in different development settings.

We didn't realise there was a multiplicity of infrastructure contribution schemes. By all means standardise and simplify, for efficiency gains by all users/contributors of these schemes.

37 Improve asset management of all government infrastructure

Fund asset managers to better understand the condition, use and performance standards of all government infrastructure. Use this information to develop asset management strategies and prioritise funding.

Support improved asset management.

38 Prepare for more recycling and waste infrastructure

Identify places for new recycling and waste infrastructure and publish them in the next update to the Victorian recycling infrastructure plan. Plan for waste and recycling sites together with other commercial and industrial land. Make changes to planning controls to allow for facilities where they are needed.

Agreed that Victoria needs more recycling facilities to reduce waste. This includes infrastructure for concrete and bricks, soils, paper, cardboard, soft plastics, electronic waste, textiles, metals, and reuse of glass bottles.

Electronic Waste

The growth in Electronic waste is a huge concern. We draw your attention to recent news from University of NSW that electronic waste recycler Renew IT has added the UNSW-designed MICROfactorie technology to its facility in Lane Cove, Sydney. It will recycle the hard plastics from items like old printers and computers into valuable filament or “ink” which will be used for 3D manufacturing and printing. Hard plastic Items that once may have ended in landfill or feedstock for Waste to Energy can now be recycled as plastic filament for 3D manufacturing and printing.¹⁵

Waste To Energy

We strongly disagree that Victoria also needs more waste to energy facilities to divert waste from landfill. Waste to Energy is inconsistent with a circular economy. Burning waste is a linear process.

We oppose the government’s plan to increase Victoria’s waste to energy cap, and have made a submission to that effect. We argue the Government should Reassess Waste to Energy Framework as inconsistent with circular economy, and investigate residual waste recycling and best methods for limited residual waste landfill and its management.¹⁶

Glass recycling and the purple bin

The glass recycling from the purple bin if it is crushed up and used as infill for roads and construction projects, is not true recycling. If the glass is separated by colour, then melted for new bottles is an energy intensive process. Instead glass bottles and jars should be washed and sterilised for reuse, which avoids the energy in remelting glass.

The Container Deposit Scheme should be used to accept a range of glass bottles for collection to be washed out and reused. This should be part of extended product stewardship. If necessary, producers should standardise on glass bottle design to enhance their reuse, as is done in glass bottle reuse in Germany.¹⁷

See this assessment for the benefits of reuse of wine bottles in Germany: “Sensitivity analysis indicates that even one reuse cycle for wine bottles offers environmental benefit compared over single-use.”¹⁸

¹⁵ UNSW March 2025,

<https://www.unsw.edu.au/newsroom/news/2025/03/world-first-UNSW-designed-recycling-facility-launch>

¹⁶ Climate Action Merribek, 17 April 2025, Striking the right balance for waste to energy in Victoria https://climateactionmerribek.org/wp-content/uploads/2025/04/2025-04-17-cam-submission_victorian-waste-to-energy-cap-1.pdf

¹⁷ See Tomra, 30 August 2023, Deposit return scheme in Germany: the world’s highest-performing drink container recycling system <https://www.tomra.com/reverse-vending/media-center/feature-articles/germany-deposit-return-scheme>

¹⁸ Science Direct, Caspers, Bade & Finkbeiner, Cleaner Engineering and Technology, Volume 25, March 2025, Reusable beverages packaging: A life cycle assessment of glass bottles for wine packaging <https://www.sciencedirect.com/science/article/pii/S2666790825000370>

39 Use digital technologies to better design, build, operate and maintain government infrastructure

Pilot digital technologies on government infrastructure projects and report on their progress. Use building information modelling on major infrastructure and housing projects. Improve capabilities in government agencies and review procurement processes to promote greater use of digital technologies.

We support the Government to use open source software for digital technologies where possible. This is likely to be more robust for cyber security. It also supports the open software movement, which operates more transparently than corporate technologies.

40 Use modern traffic control technology for efficient and safe journeys

Further extend modern traffic control technology like sensors and cameras along arterial roads in Victoria's largest cities. Begin expanding smart motorways into Melbourne's growth area Freeways.

We agree that Traffic control technology needs to be implemented to deliver smoother and safer journeys.

We also strongly agree with the assertion that "Governments usually build bigger roads to manage congestion. But evidence from around the world confirms that expanding roads only works for a short time. The roads soon become congested again because more motorists start using them."

We need to be thinking about moving people, not moving cars. This means a change in focus to enabling and encouraging greater use of public transport and active transport. Increased Frequency of Service to a 'turn up and go' level, and matching timetables are key.

Future option: Charge people fairly to use roads

Introduce road charges that help manage congestion and improve productivity. Consider options such as car parking levies, off-peak freeway tolls, congestion pricing trials, or road user charging for all motorists with lowered fixed road charges. Work with the Australian Government on road pricing options.

Agree with introducing road pricing reforms. But at the same time public transport and active transport infrastructure, service frequency and matching connecting services need to be improved to encourage change in behaviour.

41 Make rail freight competitive, reliable and efficient

Develop and publish a 30-year integrated rail freight network plan and fund a 10-year rail freight maintenance program. Develop a freight network coordination policy.

Agree with developing a 30-year integrated plan for the rail freight network.

Development of the Port Rail Shuttle is needed for movement of a substantial volume of container freight from the port to around industrial areas of Melbourne. Incentives are likely needed for this shift from road to rail. Major benefits will be less congestion, and less pollution impact on residents in inner Western Melbourne. A freight line to Webb Dock seems important to develop. We note the recommendations of the Victorian Auditor General's Office from June 2023 - Effectiveness of Rail Freight Support Programs.¹⁹

Investigate with rail authorities improvement to the Sydney Melbourne line for a faster passenger service, but also increase efficiency of intercapital rail freight service. The Hume highway has been expanded and heavily subsidised for road freight. It is road freight that does most of the road damage that requires ongoing maintenance. Upgrading intercapital freight would be more efficient and likely improve safety for those travelling on the Hume Highway.

Long-term funding for rail freight network maintenance is important.

42 Encourage off-peak freight delivery in urban areas

Prepare for growing freight volumes in urban areas by piloting an off-peak freight delivery program in a high-density area of Melbourne. If successful, expand off-peak delivery for more productive and sustainable freight movement.

While transferring to off-peak delivery has benefits, we think there should be more investigation into alternate solutions that could also be implemented. There may be a range of changes that can be made that will reduce emissions and reduce congestion.

We suggest that the establishment of Micro logistics hubs be investigated.²⁰ Along with deployment of e-cargo bikes for last mile delivery.

A study from March 2025 from Italy demonstrated that "e-cargo bikes could fulfil up to 20% of urban freight demand, depending on the category of goods transported, and underscore the feasibility of integrating e-cargo bikes into urban logistics systems."²¹

A review article from June 2024 - *Decoding cargo bikes' potential to be a sustainable last-mile delivery mode: an operations management perspective* - "analysing 49 articles published between 2017 and 2023. The findings demonstrate that cargo bikes can utilise

¹⁹ VAGO, 27 June 2023, Effectiveness of Rail Freight Support Programs
<https://www.audit.vic.gov.au/report/effectiveness-rail-freight-support-programs>

²⁰ C40 Knowledge Hub, April 2025, How cities can establish micro-logistics hubs to reduce urban freight emissions and congestion,
https://www.c40knowledgehub.org/s/article/How-cities-can-establish-micro-logistics-hubs-to-reduce-urban-freight-emissions-and-congestion?language=en_US

²¹ Mantecchini, L.; Nanni Costa, F.P.; Rizzello, V. Last Mile Urban Freight Distribution: A Modelling Framework to Estimate E-Cargo Bike Freight Attraction Demand Share. *Future Transp.* 2025, 5, 31.
<https://doi.org/10.3390/futuretransp5010031>

their potential as a sustainable last-mile delivery mode if: (a) their operations are optimised (from parking to routing and from traffic management to load capacity planning); (b) their social sustainability performance is enhanced (e.g. safety, security, fatigue of workforce); and (c) the cities hosting them invest in bike-friendly infrastructure, regulatory frameworks, land use approaches and mobility hubs. This paper offers cargo bike insights that can assist relevant stakeholders to enhance their efficiency and overall adoption.”²²

Clearly more options need to be investigated.

Future option: Plan for more efficient and sustainable urban freight

Develop a network of urban freight delivery precincts in Melbourne to improve freight productivity and reduce emissions.

Agree

43 Create and preserve opportunities for future major infrastructure projects

Create and preserve opportunities to build major infrastructure projects which might be required in the long term. This includes expanding desalination capacity, City Loop reconfiguration, extending and electrifying metropolitan trains to growth areas in Melbourne's north and south-east, Melbourne Metro 2, the Bay West port, the outer metropolitan road and rail corridor and connecting western intermodal freight terminal.

Electrifying suburban train service to Melbourne's north and west needs to be a high priority.

Future option: Reconfigure the City Loop for more frequent and reliable trains

Reconfigure the City Loop by splitting 2 City Loop tunnels into 2 separate cross-city train lines.

Build around 3 kilometres of new train tunnels and upgrade related power and signalling. Increase service frequency on the Craigieburn, Upfield and Frankston lines.

We strongly disagree that residents along the Craigieburn line, Upfield line should have to wait well past 2030 for any service frequency improvement.

Note: Increased frequency on the Upfield line when the Metro Tunnel opens in 2025 was promised by Transport Minister now Premier Jacinta Allan in 2018,²³ and Anthony Cianflone

²² Michalakopoulou, K., Vann Yaroson, E., & Chatziioannou, I. (2024). Decoding cargo bikes' potential to be a sustainable last-mile delivery mode: an operations management perspective. *Transportation Planning and Technology*, 1–23. <https://doi.org/10.1080/03081060.2024.2375630>

²³ Timna Jacks, The Age, November 6, 2018, Sluggish Upfield's service boost still seven years away, <https://www.theage.com.au/politics/victoria/sluggish-upfield-s-service-boost-still-seven-years-away-20181106-p50e8u.html>

in 2022²⁴. A 70% increase in capacity was promised. There will be hell to pay at the ballot box if the State Government fails to meet that increased level of service as promised, particularly for residents north of Coburg.

Future option: Extend metropolitan trains to growth areas in Melbourne's north and south-east

Extend and electrify metropolitan trains to Clyde and towards Kalkallo to support growth in new suburbs.

We strongly disagree that residents in the Northern suburbs should have to wait to well past 2030 for extension of the Upfield line north to Craigieburn and beyond.

In the next decade the population north of Craigieburn in areas such as Kalkallo, Mickleham, Donnybrook, Beveridge and Wallan is projected to be between 90,000 and 100,000 people, with no decent access to public transport, high dependency on cars that add to road congestion.

The Broadmeadows/Craigieburn line is also approaching capacity with poor service frequency.

The Hume Highway Craigieburn bypass is already at capacity during peak times.

Residents north of Coburg already complain of poor service frequency and unreliable service with trains occasionally short shunted at Coburg. Service frequency cannot be increased due to the single track north of Gowrie and a single platform at Upfield.

Infrastructure Australia identified in 2016: Melbourne outer northern suburbs to CBD capacity upgrade was needed, within a 6-10 year timeframe.²⁵ Infrastructure Victoria and the State Government appear to have ignored this assessment, including in this Draft Strategy, pushing upgrade of Upfield line and extension well past 2030 into the future.

We note in a media report in the Age in 2014 that the rail operator, Metro trains, called for the track duplication on the Upfield Line by 2017.

"Metro has called for the single-track section of the Upfield line to be duplicated by 2017, arguing that services on the line should be increased "towards a 10-minute frequency".

In a proposal to the state government, Melbourne's rail operator says the single track should be duplicated because it also puts pressure on the Craigieburn and Sunbury

²⁴ Anthony Cianflone MP in 2022 promising 70% increase in capacity, <https://www.facebook.com/watch/?v=1764267434367861>

²⁵ Infrastructure Australia Northern suburbs Transport corridor assessment, last update 18 Feb 2022, <https://www.infrastructureaustralia.gov.au/map/melbourne-outer-northern-suburbs-cbd-capacity-upgrade>

lines, two of Melbourne's busiest and most prone to peak-hour overcrowding, because all three lines are linked in a northern group."²⁶

Just in the last month, during the 2025 Federal Election, the Federal Liberal Party committed \$2 million for a scoping Report to upgrade and extend the Upfield Rail Line. Federal Labor has committed \$7 million for planning, design and scheduling upgrade and extension. The Greens Call for the immediate duplication and extension of the line. Meanwhile the State Government is sitting on a 2018 \$5 million Somerton Link Report, refusing to make this public, which likely provides all the technical details for upgrade and extension of the Upfield Rail Line.

This Draft Infrastructure report calls for extension of the suburban rail network to Kalkallo without providing any reason for this as the terminus. Surely Wallan is a more suitable terminus for the extension of the suburban rail network at Melbourne's northern urban periphery. Extension to Wallan, not Kalkallo, is called for in the Rail Network Development Plan.

Upfield line Upgrade and extension to Wallan in Rail Network Development Plan

The Rail Network Development plan from 2012, updated in 2016, called for upgrading the Upfield Line and extension to Wallan, which this Draft Infrastructure Strategy appears to fail to take into account.²⁷

The Network Development Plan sets out stages and priorities for development of Melbourne's suburban rail network.

The plan sets out 4 stages, and we are currently in Stage 2 of the plan. It is possible for elements of the plan to be delayed or moved forward according to political priorities and other projects. For example, the extension from South Morang to Mernda was in stage 4 to be done in the early 2030s but a local campaign and political decision brought this project forward, and was completed in 2019.

Just to note a deficiency in the Rail Network Development Plan: there is no mention of reinstatement of Campbellfield Station in the plan, even though foundations for the station were constructed at the time of Camp Road level crossing removal..

Stage 2 (within 10 years) – ie 2012-2022):

– Upfield second platform

Note: Stage 2 includes Metro tunnel, forecast to open in 2025. When the Metro tunnel opens, 6 services an hour at peak time on the Upfield line would involve interweaving a service from Upfield with a service terminating either at Coburg or Gowrie. The Second

²⁶ Adam Carey, The Age, 22 January 2014, Single line to Upfield worsens north-west rail woes <https://www.theage.com.au/national/victoria/single-line-to-upfield-worsens-northwest-rail-woes-20140122-318u5.html>

²⁷ See Network Development Plan – Metropolitan Rail (December 2012 as updated in 2016) https://www.ptv.vic.gov.au/assets/PTV-default-site/footer/legal-and-policies/growing-our-rail-network-2018-2025/PTV_Network-Development-Plan_Metropolitan-Rail_2016update_AccessibleVersion.DOC

Platform at Upfield is also needed. See section 11.4. There is already a failure to implement a second platform at Upfield according to this timetable. A second platform could enable increase in service frequency for the whole line.

Budget decisions with Metro Tunnel ancillary projects taken in late 2024 seem to indicate that no turnback will be installed at Gowrie station.

Stage 3 (within 15 years) – ie 2012-2027)

- Reinstatement of the Somerton to Upfield link

Note see sections 13.4 and 14.8. The line between Gowrie to Upfield would need duplication in combination with constructing the Somerton Link (See 14.8)

We note that the Infrastructure Victoria Draft strategy pushes out Somerton Link to sometime in the future, past 2030

Stage 4 (within 20 years) – ie 2012-2032)

- Electrification projects to Geelong and Wallan

- Extension to Mernda and new stabling facilities (already completed in 2019)

Note: See section 15.6 (Sandringham to Wallan) and 16.3 (Electrification to Wallan)

We note that the Infrastructure Victoria Draft strategy pushes out suburban rail extension only to Kalkallo, not Wallan, and to sometime in the future, past 2030.

Take note that stages do not denote specific years, and work for later stages is sometimes dependent on previous stages. Also note that projects can be advanced: the extension of South Morang to Mernda extension was a stage 4 project for early 2030s completed in 2019.

Northern Suburbs score poorly across numerous measures highlighting poor infrastructure

We also draw your attention to the City Liveability Scorecard for Melbourne:2021, which on almost every criteria ranks the outer northern suburbs as poor or low, including on public transport, walkability and cost of living (VAMPIRE Index).²⁸

²⁸ Both, A., Roberts, R., Gudes, O., Gunn, L., & Davern, M. (2024). Scorecards measuring and monitoring the liveability of the 21 largest cities of Australia: City Liveability Scorecard for Melbourne 2021. RMIT University, Melbourne.
https://auo.org.au/wp-content/uploads/2024/10/City_Liveability_Scorecard_for_MELBOURNE_2021.pdf