28 April 2025

Infrastructure Victoria
Level 31, 535 Collins Street
Melbourne VIC 3000

via: ██████████████████

Re: Infrastructure Victoria's Draft 30-Year Infrastructure Strategy

The Urban Development Institute of Australia, Victoria (UDIA) welcomes the opportunity to contribute to Infrastructure Victoria's Draft 30-Year Infrastructure Strategy. We commend Infrastructure Victoria's continued focus on long-term planning and look forward to ongoing collaboration to support infrastructure delivery that underpins housing, jobs, and sustainable growth across the state.

About UDIA and our submission

UDIA is the peak industry body representing the urban development sector across the state of Victoria. We are a not-for-profit organisation comprising members from across the residential and mixed-use development industry, including developers, consultants and public sector partners.

UDIA's work is focused on ensuring the right infrastructure, policy and investment settings are in place to deliver the housing and employment precincts required to support Victoria's growing population. We are committed to collaborating with all levels of government to inform evidence based, practical solutions that align infrastructure planning with land use policy, improve housing affordability, and enhance the liveability of our cities and regions. Our work is underpinned by industry expertise and rigorous research, tracking trends in land supply, development feasibility, infrastructure contributions, planning processes, and construction costs. This insight allows us to provide government with grounded advice on how to improve infrastructure delivery and unlock housing supply across a diverse range of urban contexts.

As a signatory to the Victorian Government's Affordability Partnership, UDIA is actively working to support the urban development industry to deliver more homes than ever before. Many of the objectives of Infrastructure Victoria's Strategy are aligned with this ambition enabling more homes, jobs and services to be delivered in places people want to live, supported by well planned, timely and cost-effective infrastructure.

Our submission is focused on areas within our core expertise in urban development: planning, transport, sustainability, and engineering. We have not provided commentary on recommendations that fall outside these domains. We commend the thorough and future-focused work that has gone into Infrastructure Victoria's 30-Year Infrastructure Strategy. Our feedback reflects the practical insights and professional expertise of our members who are on the frontlines delivering housing in Victoria, which we believe can help contextualise and improve on the Strategy.

Planning

Recommendation 1: Build more social housing

UDIA supports sustained investment in social housing to meet urgent demand, noting over 65,000 Victorians are on the housing register waiting list.[1] Social housing is a necessary component of a well-functioning housing market, providing stability for those unable to access the private market and reducing long-term pressure on other key public services. However, the financial feasibility of delivering these projects must be front of mind.

UDIA considers social and affordable housing to be critical social infrastructure that has direct economic outcomes in terms of Victoria's productivity, livability, and prosperity. We seek to ensure policy and planning decisions prioritise housing affordability by providing investment certainty, facilitating robust housing supply, and ensuring that state and local government policy considers affordability impacts.

There is ongoing policy discussion about the most appropriate mechanism to fund affordable (including social) housing, which often posits taxing 'profits' or 'windfall gains' from residential development to fund affordable housing. This assumes the new housing being taxed is not affordable, ignores the fact that a cross-subsidy will be created whereby new housing solely funds new affordable housing, and has no regard for the impact on the viability of residential development projects that may well not proceed.

The impact of taxing new housing to fund new affordable and social housing reduces the overall supply of new housing and increases the cost of the housing that remains viable, thereby increasing the need for additional affordable (including social) housing. The same is often true for the imposition of mandatory inclusion of social and affordable housing in private development.

UDIA welcomes the opportunity to discuss the merits of mechanisms to fund affordable housing, however this discussion must be properly informed about the contribution of private market housing to the housing continuum in general, and affordable housing in particular. UDIA rejects the presumption the private market delivers no affordable housing unless required as condition on a planning permit.

UDIA recommends:

- Prioritise the use of high-quality, cost effective, low maintenance materials in social housing design to reduce long-term maintenance and delivery costs.
- Support innovative methods of construction that deliver efficiencies at scale while maintaining high quality, built form outcomes.
- Adopt streamlined planning and approval pathways to avoid undue delays and cost impacts as a result of lengthy planning processes.
- Ensure that any additional social housing programs are financially feasible and supported by appropriate delivery mechanisms, including land availability, funding certainty and appropriate cost controls.
- Avoid relying on blanket planning mechanisms like inclusionary zoning that do not consider the overall impact on development viability. Instead, consider incentive pathways like density uplifts to encourage private sector involvement in the provision of social and affordable housing.

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[1] Council to Homeless Persons, *Social Housing Waitlist Surges Past 65,000,* 10 April 2025

<u>Recommendation 4: Expand TAFE in Melbourne's growth areas and some large regional centres</u>

While Precinct Structure Plans (PSPs) in Melbourne's growth areas routinely allocate land for primary and secondary education, planning for tertiary education is not typically considered as part of the current process. There is an opportunity to address this gap by reserving appropriately sized lots in the early stages of planning for potential future use by TAFE and other tertiary institutions.

Given the scale required for tertiary education campuses, proactive consultation with training providers will be essential to understand location requirements and ensure suitable land is available within PSPs. Although tertiary uses may be permissible within existing zone frameworks, they will not be delivered unless land is identified during the early stages of planning. Access to vocational training in growth areas is critical to address the skilled labour shortages impacting the construction, energy, technology and health sectors. Ensuring local access to TAFE will also reduce travel barriers for students living in Melbourne's outer suburbs and in key regional centres.

However, it is critical that the allocation of land for these purposes is considered in the context of a worsening housing crisis. The PSPs for Melton East, Devon Meadows and Casey Fields, recently released for public exhibition, have shown a notable reduction in net developable area allocated for housing – a result of land being quarantined for other policy imperatives.

UDIA recommends:

- Work with industry and TAFE providers to proactively identify opportunities for tertiary education uses within future PSPs.
- Ensure reservation of appropriately sized lots does not jeopardise commercial viability of delivery across a PSP.
- Engage early with tertiary providers to understand spatial requirements and land use suitability within the planning scheme.
- Explore opportunities to co-locate future TAFE campuses with complementary community or education infrastructure, such as business hubs or senior secondary colleges.

<u>Recommendation 5: Build libraries and aquatic centres for Melbourne's growing communities</u>

In Melbourne's growth areas, essential infrastructure such as roads, utilities and schools are generally planned for and delivered as part of new communities. However, broader community facilities such as libraries, aquatic centres and recreation hubs which are readily accessible in established suburbs are often lacking in new communities or they face significant delays in their delivery.

While PSPs may designate land for these uses, the parcels can be small and located in ways that do not support early delivery or long-term value. Developers are frequently dissuaded from acquiring land with these delegated uses due to the reduction in Net Developable Area (NDA), limited clarity on timing, and negligible financial return. To improve social infrastructure outcomes in growth areas, the operational approach to land identification, transfer and delivery responsibilities must better reflect the commercial realities of development and provide clearer pathways for timely, coordinated delivery.

We also note that the provision of essential public services, infrastructure and amenities are the responsibility of government and the development industry supplements the cost of its delivery through existing contributions regimes, including Growth Area Infrastructure Contributions (GAIC) and Development Contribution Plans (DCPs).

UDIA recommends:

- Review how land for community facilities (such as libraries and aquatic centres) is identified, sized and located to optimise usability and deliverability.
- Reform the delivery framework so that funding and responsibility for these facilities is clear, coordinated and not reliant on inconsistent processes.

Recommendation 7: Rezone locations near existing infrastructure for more home choices

Infrastructure Victoria state '*Building new infrastructure in [growth] areas can be up to four times more expensive than adapting existing infrastructure in established suburbs.*'[2] It is a figure that overlooks key delivery and feasibility considerations that affect infill housing outcomes. In practice, infill development faces considerable impediments that are not always factored into comparative costings.

The augmentation of existing infrastructure to support increased density in established suburbs is highly complex. Upgrading ageing water, sewerage, drainage or electricity networks can involve protracted timelines, significant engineering constraints, and costly disruptions, particularly where road closures or works in constrained corridors are required. Unlike greenfield sites, where coordinated infrastructure can be delivered at scale with fewer logistical constraints, infill infrastructure upgrades must contend with existing assets, traffic volumes, and live service connections. Moreover, infill proposals routinely encounter significant localised political opposition, protracted planning processes and third-party appeals, especially where increased density interfaces with existing neighbourhood character. These factors contribute to delays and compound holding costs, reducing the relative economic advantage of infill development.

These factors all significantly add to the cost of construction, which impacts consumer demand when it is reflected in pricing. The market demand for ownership of infill products, particularly higher density apartments, remains weak across many Melbourne municipalities, affecting both financial viability and pace of delivery.[3] Across the 2024 calendar year, apartment and townhouse transactions were down 71 per cent from their 2015 peak, and down 50 per cent on the decade average.[4]

While urban renewal will remain a critical part of the housing supply mix, particularly where well-located land exists near services and existing infrastructure, it is not a low cost and certainly not a faster pathway to housing delivery. Policy settings must recognise that both infill and greenfield development face distinct, material delivery costs and risks, and each has a role in delivering the volume and diversity of housing that Victoria requires. Transport-oriented development is essential to maximising the benefit of existing infrastructure investments and encouraging more diverse housing options in well serviced areas. However, the planning system must also account for the capacity of existing infrastructure particularly utilities such as water, sewer, and electricity which often require significant upgrades before higher density development can proceed.

UDIA supports rezoning for increased housing density around existing infrastructure. While these planning changes are a step in the right direction, zoning changes alone will not deliver housing outcomes unless supported by realistic feasibility and delivery settings. The cost of delivering medium and high-density

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[2] Infrastructure Victoria, Our home choices, March 2023
[3] UDIA, State of the Land Report, 2025
[4] Ibid

housing in established areas remains a major barrier, regardless of what the planning scheme permits. Development feasibility is impacted by high construction costs, high land and holding costs, utility augmentation, constrained site conditions, localised resistance, and planning uncertainty all of which can make infill projects commercially unviable, even where zoning has been changed.

UDIA recommends:

- Continue progressing rezonings that enable higher residential densities in areas with existing infrastructure, while ensuring capacity constraints are fully assessed and planned for.
- Government funding support to address the high cost of upgrading ageing utility infrastructure required to enable infill development.
- Recognise that increased density on paper does not automatically result in housing delivery, and ensure feasibility is factored into strategic planning decisions.
- Incorporate industry input into the sequencing and design of urban renewal strategies to reflect real-world cost, staging and market appetite.
- Ensure that infrastructure funding, tax reform and streamlined planning processes are pursued in parallel with rezoning to stimulate demand for higher density development.

<u>Future Option:</u> Mandate more affordable homes near existing infrastructure

Increasing access to affordable housing in well located areas is an important goal from a social planning perspective. However, for any affordable housing mechanism to be successful, it must be financially viable and not inadvertently worsen affordability outcomes for the broader market. Mandating the delivery of a set proportion of affordable dwellings in new developments will increase overall project costs. Unless there is a mechanism to absorb these costs such as public subsidy, uplift incentives, or meaningful planning concessions the financial burden will be shifted onto the remaining market dwellings. This can result in higher prices for market housing and reduce the overall affordability of housing supply.

UDIA recommends:

- Avoid implementing blanket inclusionary zoning mandates that compromise development feasibility and risk increasing prices for non-subsidised dwellings.
- Explore targeted subsidies, tax credits or value sharing frameworks to help cover the cost of delivering affordable housing.
- Support affordable housing delivery through practical incentives such as planning flexibility, reduced holding costs and density uplifts.
- Prioritise initiatives to address escalating construction costs as a core strategy to improve the feasibility of housing delivery.
- Ensure any new requirements are developed in close collaboration with industry, with clear modelling and transition pathways to avoid unintended market impacts.
- Support the development industry to deliver affordable market housing, recognising this is the greatest opportunity to improve housing affordability across the housing continuum.

<u>Recommendation 26:</u> Better use of government land for open space and greenery

Greening urban areas delivers a range of benefits, including improved air quality, enhanced amenity, increased tree canopy cover, and reduced urban heat. The recent update to planning requirements for medium-density development has rightly placed greater emphasis on vegetation within private lots, complementing efforts to improve public realm outcomes in established suburbs.

Thoughtful planning is required to ensure that green spaces in established suburbs and new communities are fit for purpose, support local use, and enhance the broader landscape character. This includes identifying and enhancing underutilised government land to fill open space gaps and creating functional, activated spaces that contribute to community wellbeing.

UDIA recommends:

- Prioritise the strategic use of surplus or underutilised government land for meaningful open space outcomes, especially in high growth areas.
- Ensure that government-owned land designated for open space in growth areas is appropriately planned, landscaped, and integrated into the surrounding urban fabric to encourage community use.
- Improve coordination between the VPA, councils and park management agencies to ensure early planning and delivery of usable green spaces.
- Support the greening of both public and private land through continued refinement of planning controls, ensuring tree canopy objectives are appropriate across all development types.

Recommendation 28: Use new flood maps to revise planning schemes

A consistent and accurate evidence base is critical to facilitating timely, well informed development decisions. This is particularly true for flood data, where discrepancies between local councils, referral authorities, and applicants routinely result in delays, rework, and unnecessary costs.

In many cases, existing flood mapping is outdated or incomplete, which forces developers to commission additional modelling during the approvals process to verify that perceived risks are not actually present. This adds considerable time and cost to projects, often without delivering better environmental or safety outcomes. Access to updated and accurate flood mapping at the outset of a project enables better due diligence, more efficient planning assessments, and more strategic land acquisition decisions. Embedding this information directly into the planning scheme will provide clarity and consistency across all stakeholders.

UDIA recommends:

- Ensure that updated flood data is collected and maintained using consistent methodologies across all councils and authorities.
- Embed new flood mapping into the planning scheme via overlays or appropriate planning controls to provide clarity and reduce approval timeframes.
- Coordinate the update and application of flood mapping at a statewide level, rather than leaving this responsibility to individual councils.
- Ensure that flood mapping is made publicly available and integrated into the early planning stages to support well informed land acquisition and design decisions.
- Streamline the approval process for developments that incorporate best-practice flood mitigation measures, reducing duplication and unnecessary referrals.

Recommendation 36: Reform infrastructure contributions

Victoria's current infrastructure contributions system is complex, fragmented and inconsistent, often leading to uncertainty and higher costs for development. The existing array of contribution mechanisms including Development Contributions Plans (DCPs), Infrastructure Contributions Plans (ICPs), the Growth

Areas Infrastructure Contribution (GAIC), public open space levies and the Windfall Gains Tax adds layers of duplication and compliance burden across both greenfield and infill development contexts.

High rates of development contributions and complex administrative processes can impact the timely and cost-effective delivery of housing and contribute to affordability pressures across the state.

UDIA is a signatory to the State Government's Housing Industry Affordability Partnership and consulting extensively on the government's plans to reform the State's contribution regimes. While we acknowledge the intent behind development contribution reform, we are committed to ensuring any reforms deliver improved community and industry outcomes.

UDIA recommends:

- Work closely with industry to understand the complexity of existing frameworks.
- Ensure that contribution rates reflect the actual cost of delivering infrastructure and are set transparently with industry input.
- Tie collected funds to the timely and geographically relevant delivery of infrastructure, ensuring that development-ready land is serviced without delay.
- Ensure the collection of contributions are reinvested in the locations from which they are collected.
- Ensure infrastructure contribution reform is considered in the broader context of the considerable contribution industry already makes towards infrastructure provision
- Ensure any reforms deliver improved industry outcomes and provide appropriate transitional provisions.

Transport

Recommendation 6: Make government infrastructure more accessible

Equitable access to transport infrastructure is essential to building inclusive communities and ensuring that people of all abilities can safely and confidently navigate the public transport network. Meeting the Disability Standards for Accessible Public Transport (DSAPT) is a critical compliance obligation and a key part of future-proofing Victoria's infrastructure.

While physical upgrades to infrastructure such as stations, tram stops and footpaths are necessary to meet baseline accessibility standards, the provision of assistive technologies can significantly enhance usability and convenience for individuals with disabilities. These improvements can often be delivered at relatively low cost but have a high impact on user experience. UDIA supports an integrated approach that combines required infrastructure upgrades with innovative, user-centred technology to deliver inclusive public transport outcomes.

UDIA recommends:

- Continue upgrading transport infrastructure to meet DSAPT requirements.
- Incorporate assistive technologies such as real time audio-visual information, tactile guidance surfaces, and mobile navigation apps into new and existing infrastructure where feasible.
- Embed universal design principles into all new infrastructure projects to ensure accessibility is built in from the outset.

- Coordinate communication and alternative transport options during accessibility related upgrade works to minimise disruption for users with disabilities.

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

Connecting communities to reliable, high frequency public transport is critical to supporting housing growth, local employment and mixed-use activity. While tram extensions in established suburbs can deliver long term connectivity benefits, they are capital-intensive and often slow to deliver.

Other public transport options such as Bus Rapid Transit (BRT) or bus priority infrastructure may provide similar outcomes at a lower cost and with greater speed of delivery. These alternatives should be assessed rigorously through cost benefit analysis before committing to major tram expansions. Where any fixed line or rapid transit investments are made, surrounding land should be proactively rezoned to support greater residential density and mixed-use development. This will enhance housing supply, support local economic activity and ensure the infrastructure investment delivers broader community benefits.

UDIA recommends:

- Undertake detailed cost benefit analysis of public transport options, including tram extensions, Bus Rapid Transit and enhanced bus services, to determine the most efficient and effective solutions.
- Consider BRT and other lower cost transit models as viable alternatives to tram investment, particularly in corridors where rapid delivery is a priority.
- Ensure land along new or extended public transport corridors is strategically rezoned to increase density and support mixed use outcomes.
- Integrate transport planning with land use and precinct planning to encourage vibrant, connected communities with diverse housing, employment and services.

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

A high quality, frequent and reliable bus network is critical to connecting residents to jobs, education, services and activity centres particularly in areas not serviced by rail. Achieving a consistent "turn up and go" frequency of 15 minutes or better on the Principal Public Transport Network (PPTN), operating throughout the day and into the evening, is key to shifting travel behaviour and reducing car dependency. Most people are willing to walk slightly further to a bus stop if the service is fast, predictable and well connected. Improving the integration of buses with train stations, tram corridors and major activity centres will maximise network efficiency and encourage uptake. Bus priority infrastructure, real time passenger information, and high-quality stop amenities all contribute to a positive user experience and should be delivered as standard across key routes.

UDIA recommends:

- Target 15 minute or better service frequency throughout the day and evening on the Principal Public Transport Network to enable convenience and encourage people to incorporate bus travel into their daily routines as a dependable alternative to driving.
- Improve connectivity between bus services and other modes particularly train stations, tram routes and major activity centres to support integrated travel.
- Apply smart traffic management technology to prioritise buses on the road network, reducing travel times and improving reliability.

- Deliver consistent, high quality bus stop infrastructure that includes:
- Safe, visible and accessible locations with good lighting and pedestrian access
- Bicycle access, including secure racks at stops and on buses where feasible
- Simplify and streamline bus routes to reduce travel times.

Recommendation 10: Build a new bus rapid transit network

Building on the importance of improving frequency and reliability across the Principal Public Transport Network, a dedicated Bus Rapid Transit (BRT) system presents an opportunity to provide high capacity, high speed public transport connections across Melbourne's growth and established suburbs.

BRT has the potential to deliver rail-like performance using buses, with lower capital cost and faster delivery timeframes. For this to be effective, any future BRT network must be planned to directly connect key activity centres, employment precincts, education hubs and rail interchanges. These connections are critical to ensuring the network functions as a genuine alternative to car travel and supports integrated land use outcomes. Early corridor protection and targeted pilot projects will be essential to build public confidence and allow for scalable implementation.

UDIA recommends:

- Investigate and deliver a Bus Rapid Transit (BRT) network to service priority corridors not well covered by rail, with a focus on high demand growth areas.
- Ensure the BRT network is planned to connect key activity centres, employment hubs, education precincts and major interchanges to support integrated trips and economic activity.
- Undertake corridor assessments to identify where dedicated lanes or median alignments can be protected or reserved for future BRT use.
- Implement pilot rapid bus routes using priority measures and limited stops to demonstrate demand and build support for broader network rollout.
- Align the BRT program with broader strategic land use and housing plans to maximise the benefits of public transport investment and support transit-oriented development.

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

Expanding the reach of Melbourne's metropolitan rail network is critical to supporting population growth in the city's outer suburbs and reducing reliance on private vehicles. Electrifying and duplicating lines to Melton and Wyndham Vale will enable high frequency, metro-style services for communities that are currently dependent on less frequent regional V/Line trains. These upgrades are an essential component of the Western Rail Plan and will also increase capacity on the Geelong and Ballarat corridors by freeing up regional train paths. To maximise the benefit of these investments, station precinct planning should support transit-oriented development including higher density housing, local employment and services.

In addition to western corridor upgrades, there is a strategic opportunity to extend and electrify the metropolitan network northwards from Craigieburn to Wallan to support growing communities in Melbourne's northern growth corridor. Early planning and corridor protection for this extension should commence in parallel with western upgrades to provide long term certainty and unlock housing supply.

UDIA recommends:

- Prioritise the electrification, duplication and integration of rail lines to Melton and Wyndham Vale into the metropolitan train network.
- Plan and deliver transit-oriented development around new and upgraded stations, including increased housing density and local activity centres.
- Progress planning to extend and electrify the metropolitan rail network north from Craigieburn to Wallan, aligned with long term growth forecasts for Melbourne's northern corridor.
- Coordinate major rail upgrades with other infrastructure investments such as Melbourne Airport Rail and Geelong Fast Rail to ensure efficient integration at network hubs.
- Provide clear delivery timelines and staging to support private sector investment and coordinated planning outcomes across all impacted growth areas.

Recommendation 12: Run more bus and coach services in regional Victoria

Improving public transport connectivity in regional Victoria is essential to supporting equitable access to employment, education and essential services. Many regional communities remain underserved by current bus and coach services, particularly in peri-urban growth areas where population growth has outpaced transport infrastructure. More frequent, reliable and better integrated services will support regional liveability and improve the viability of decentralisation efforts. In particular, aligning bus and coach timetables with regional rail is critical to ensuring seamless travel and encouraging greater public transport uptake. Additionally, integrating V/Line coach services with cross-border networks in southern New South Wales would provide added value for border communities, many of which are functionally interconnected in terms of workforce, education and service access.

UDIA recommends:

- Increase the frequency, span and reliability of regional bus and coach services, with particular attention to growing peri-urban areas around Ballarat, Bendigo and Geelong.
- Ensure coach and bus timetables are aligned with V/Line rail services to support efficient transfers and connected journeys.
- Explore opportunities to integrate V/Line services with New South Wales regional transport networks to better serve cross-border communities.
- Trial flexible and on-demand bus options in low density regional centres where fixed-route services may be less effective.
- Prioritise regional transport upgrades as part of broader efforts to support decentralisation and the long-term sustainability of regional housing markets.

Recommendation 14: Make local streets safer for children and communities

Creating safer local streets is important for improving neighbourhood liveability, encouraging active transport and enhancing access to schools and community services. However, UDIA supports a more targeted and proactive strategy than reducing speed limits further. Government, schools and local communities should work together to deliver 'Safe and Active Routes to School' programs. These programs focus on improving infrastructure, education and signage to encourage walking and cycling in a safe, supported way rather than relying on impractically low speed limits. Improving pedestrian safety near schools should be informed by local risk assessments, supported by practical design interventions and complemented by community engagement. Lower speed limits may play a role in some areas but should not be the default solution in isolation.

UDIA recommends:

- Prioritise the development and implementation of 'Safe and Active Routes to School' programs in partnership with schools and councils to improve safety and encourage active travel.
- Target investment in infrastructure improvements such as pedestrian crossings, bike lanes, and signage in areas with high child activity and access needs.
- Apply a risk-based approach to local speed management, focused on locations with demonstrated safety concerns or particularly high pedestrian volumes.

Recommendation 15: Build safe cycling networks in Melbourne and regional cities

There is a clear need to prioritise the delivery of safe and accessible cycling infrastructure that caters to all ages and abilities, particularly where it improves connectivity to and from activity centres, public transport hubs, and key community destinations. While investment in cycling infrastructure is ongoing, there is an opportunity to sharpen the focus on functional connectivity ensuring that cycle paths are not only high quality but also located where they can provide the greatest transport and accessibility benefits. This includes both physically separated bike lanes on major roads and offroad paths that integrate with existing public transport infrastructure. Delivering these networks in growth areas will require coordination across government and developers, with cycling facilities embedded into the early planning of arterial road upgrades and subdivision layouts.

UDIA recommends:

- Prioritise the delivery of all ages and abilities cycling infrastructure connecting homes to public transport hubs, activity centres and key community destinations.
- Ensure cycling paths are safe, continuous and well-integrated with both new and existing transport networks.
- Incorporate shared path infrastructure into arterial road design and subdivision requirements within growth areas to build out comprehensive cycling networks.

Recommendation 40: Use modern traffic control technology for efficient and safe journeys

UDIA supports accelerating the deployment of smart traffic management systems to optimise flow on our road networks. Upgrading and expanding such technology including AI based traffic prediction and active traffic management on freeways can significantly improve travel times with minimal capital outlay. Building on the success of Victoria's Managed Motorways program, there is an opportunity to further roll out adaptive signal controls, intelligent transport systems and integrated data platforms to enhance performance, reduce congestion and increase road safety, particularly on high growth arterial corridors.

UDIA recommends:

- Explore and adopt AI based traffic management systems to enable real time optimisation of traffic flow across major corridors and intersections.
- Prioritise upgrades on arterial roads in growth areas where congestion impacts are increasing, and infrastructure upgrades are otherwise cost prohibitive.
- Integrate a wider range of data sources (e.g. connected vehicles, travel time sensors, Bluetooth beacons) to enhance the responsiveness of traffic control centres.
- Continue deployment of smart motorway features such as variable speed limits, ramp metering and lane use management on suitable arterial roads.

- Ensure all technology investments support future compatibility with connected and autonomous vehicles to maintain long term relevance and functionality.

Future Option: Charge people fairly to use roads

Road user charging has the potential to reduce emissions, encourage mode shift to active and public transport, and reduce unnecessary trips to already congested areas. As fuel tax revenues decline with the rise of electric vehicles, there is a growing need for a more sustainable and equitable model for funding transport infrastructure. Australia may likely see distance based road user charging introduced first, as it provides a direct and scalable alternative to traditional fuel excise. However, any reform must be implemented carefully, with a focus on fairness and practical transition pathways. Importantly, there are already forms of road user charging in place including fuel excise, congestion levies, council rates and toll roads. Any new model must be transparent, clearly articulated to the public, and designed to simplify and improve the current system rather than layering on additional costs.

Low-income households already spend a higher proportion of their income on transport, particularly in areas with limited alternatives to car travel. Under serviced growth areas and the regions have exacerbated "transport poverty" through forced car ownership. A well-designed road pricing system must address this imbalance.

UDIA recommends:

- Ensure any road pricing reform is revenue-neutral by offsetting existing charges, such as fuel excise and registration fees.
- Focus on equity, recognising the transport disadvantage experienced by low-income households in car-dependent locations.
- Clearly communicate the purpose, structure and reinvestment pathways for collected revenues to build public trust and support.

Recommendation 43: Create and preserve opportunities for future major infrastructure projects

Protecting land for future infrastructure is essential to avoid costly, disruptive retrofits and to ensure Victoria is equipped to meet long term population, freight and mobility demands. However, identifying future corridors is only one part of the solution there must also be a clear and consistent pipeline of development work and funding to sustain industry capability and confidence. Industry and community particularly need certainty around future project delivery and sequencing. A consistent flow of investment in business cases, engineering design and preparatory works is vital to keep delivery partners engaged and avoid a boom-bust cycle in the market.

Of particular interest are the development pathways for major state projects such as Melbourne Metro 2 (MM2), City Loop reconfiguration, the Outer Metropolitan Ring (OMR) transport corridor, and the Western Intermodal Freight Terminal. If the configuration of the future network continues to be redrawn every few years, it creates uncertainty and undermines private sector investment decisions.

UDIA recommends:

- Maintain a publicly available program of land and corridor reservations for long term infrastructure projects, including road, rail, utility and freight corridors.
- Ensure reserved infrastructure corridors are clearly identified in planning schemes

- Provide consistent funding for business case development, technical design and early works to sustain market confidence in the pipeline of future infrastructure.
- Prioritise the progressive development of major initiatives such as MM2, the City Loop reconfiguration, the Outer Metropolitan Ring, and the Western Intermodal Freight Terminal.
- Where practical, support interim uses of reserved land (such as open space or low-impact activities) while preserving long term infrastructure outcomes.

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

Reconfiguring the City Loop presents a significant opportunity to boost passenger capacity on key northern corridors, particularly the Craigieburn and Upfield lines. With an optimised loop layout, it is estimated that these corridors could support up to 18 trains per hour – a major uplift in service frequency that would better match population growth in Melbourne's northern suburbs.

While the physical tunnelling requirements for this reconfiguration are relatively limited, substantial investment in supporting infrastructure across the network will be required. This includes modern high-capacity signalling, new stabling facilities, traction power substations, upgraded overhead wiring, additional rolling stock and the construction of train turnbacks.

Increased service frequency may also necessitate further level crossing removals to maintain network safety and performance.

Despite the scale of investment needed, the benefits of this reconfiguration particularly for areas of the network that have historically received less investment are likely to outweigh the costs. This project should be considered a key focus for improving central city rail capacity and unlocking new housing and employment opportunities in Melbourne's north.

UDIA recommends:

- Invest in the necessary supporting infrastructure including high-capacity signalling, stabling, traction power upgrades, train turnbacks, and rolling stock.
- Remove single-line bottlenecks on key corridors such as the Upfield line to realise the benefits of increased capacity.
- Assess the need for additional level crossing removals along affected lines to support safety and throughput under higher service frequencies.
- Treat the City Loop reconfiguration as a core component of a long-term rail network vision for Melbourne, complementing future projects such as Metro Tunnel 2 and the Airport Rail Link.

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

Forward planning for metropolitan rail extensions to Melbourne's northern and south-eastern growth areas is essential to support long term population growth and enable sustainable transport options. However, these major infrastructure projects must be delivered in stages, aligned with development sequencing and network capacity.

In the north, a logical first stage would be the connection and duplication of the Upfield line to the Craigieburn line via Somerton. This link would allow for more flexible service patterns including both V/Line diesel services and future metropolitan services while supporting new housing growth in the corridor. In parallel, new stabling at Wallan could enable increased service frequency and act as a foundation for an eventual electrified extension. However, full electrification and increased passenger services on the

Upfield and Craigieburn lines will require prior network upgrades, including modern signalling, traction power, rolling stock and stabling capacity and may be contingent on the City Loop reconfiguration proceeding to unlock central network capacity.

In the south-east, extending the metropolitan network to Clyde poses more complex challenges due to the need for multiple level crossing removals and the likely use of elevated viaducts. As a result, the Clyde extension is likely to require delivery as a single integrated project including new stations and stabling infrastructure.

UDIA recommends:

- Consider metropolitan rail extensions in the north beginning with the duplication and connection of the Upfield and Craigieburn lines via the Somerton Link to support more services.
- Construct new stabling facilities at Wallan to support the introduction of additional V/Line services as an interim measure before electrification.
- Ensure that any future electrification of the Upfield or Craigieburn lines is supported by complementary upgrades to signalling, power, rolling stock and stabling.
- Progress the Clyde extension as a fully integrated project, acknowledging its complexity and the need for substantial level crossing removals and elevated rail structures.
- Identify land corridors and future station sites now to maintain long term viability of both the Wallan and Clyde extensions within the Metropolitan Transport Plan.

Sustainability

Recommendation 24: Reduce greenhouse gas emissions from infrastructure

Reducing emissions from infrastructure is critical to achieving Victoria's net-zero by 2045 target. However, for meaningful progress to occur, there must be a standardised and practical approach to evaluating and incentivising carbon reduction in both public and private infrastructure projects, including buildings. Introducing preferred pathways within the planning and approvals system whether via financial contributions, carbon pricing mechanisms or fast-tracked approval processes could drive innovation, promote competition, and improve project resilience. These incentives would allow projects that deliver strong carbon outcomes to be recognised and rewarded within the regulatory framework.

Flexibility within material specification standards is also vital. Infrastructure delivery should allow for innovative, lower carbon construction solutions to be assessed and approved based on performance, rather than being constrained by prescriptive or outdated material requirements.

UDIA recommends:

- Work in partnership with industry to establish a standardised framework for evaluating carbon impacts in infrastructure and building projects, applicable across planning, procurement and approvals.
- Introduce preferred carbon reduction pathways within planning and assessment processes, offering incentives such as contributions, tax offsets or planning timeframe reductions.
- Enable flexibility in material specifications for infrastructure delivery to allow assessment of innovative, low carbon products on a performance basis.

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

Expanding access to energy storage at all scales from individual homes to community and utility levels is essential for supporting the transition to a more resilient and renewable electricity network across Victoria. However, to maximise uptake and system benefit, future schemes must better enable equitable participation and incentivise broader deployment.

UDIA supports the introduction of programs that allow tenants and lower income households to contribute to and benefit from renewable energy infrastructure, particularly rooftop solar. Government-owned or managed systems may offer a pathway to facilitate more widespread access, especially where upfront capital is a barrier. Improving feed-in tariffs and enhancing the economic case for battery storage will further accelerate rollout. Battery systems offer the dual benefit of providing household energy security and reducing pressure on the broader grid at peak times.

UDIA recommends:

- Introduce schemes that support tenant participation in rooftop solar and battery storage systems to ensure a more inclusive renewable energy transition.
- Review feed-in tariffs to ensure they provide a fair return for households exporting to the grid, supporting greater solar uptake while maintaining cost-effectiveness for the broader energy system.
- Continue to scale up community battery initiatives through partnerships with distribution businesses and local governments, based on successful pilot outcomes.
- Target investment in large-scale batteries in areas of grid constraint to support new development and avoid the need for costly network upgrades.

Engineering

Recommendation 25: Advance integrated water management and use more recycled water

Integrated Water Management (IWM) remains a critical element of sustainable urban development. A coordinated approach that includes recycled water, stormwater harvesting, and wastewater reuse can significantly improve long term water security and environmental outcomes for Victoria. Recycled water for non-potable purposes, such as Class C water for irrigation, is already widely used across parts of Victoria. However, broader rollout of Class A recycled water for potable use across all metropolitan Melbourne and regional water authorities is now essential. This will future proof the state's water supply and reduce reliance on traditional water sources. Stormwater management and treatment must also continue to be a key focus. It requires close collaboration between water authorities, councils and other stakeholders to ensure alignment across infrastructure, planning and delivery responsibilities.

While integrated water management offers long term sustainability benefits, a more immediate barrier to delivering new housing in many regional areas is the absence of basic service infrastructure. The extension of sewer and potable water networks to designated growth areas is often delayed due to the limited resourcing, forward planning, and internal capability of water authorities. Importantly, regional authorities, unlike their metropolitan counterparts have limited experience responding to large scale residential growth and may not be structurally equipped to deliver the infrastructure needed within commercially viable timeframes. This gap can become a critical bottleneck, stalling land supply and undermining

regional growth strategies. Addressing these constraints will be essential to unlocking regional housing capacity and ensuring that land designated for growth can be brought to market in a timely manner.

UDIA recommends:

- Support the rollout of Class A recycled (potable) water infrastructure across all metropolitan Melbourne and regional water authorities.
- Continue investment in stormwater management and treatment initiatives, with coordinated delivery between water authorities, councils and the development industry.
- Maintain and expand dual-pipe infrastructure in new growth areas to increase access to non-potable recycled water for household and landscape use.
- Ensure pricing structures for recycled water support long term viability and uptake for both residential and commercial users.
- Ensure that regional water authorities are adequately resourced and supported to plan for and deliver sewer and potable water extensions to new growth areas, including dedicated funding pathways and infrastructure coordination frameworks.

Conclusion

Victoria's infrastructure pipeline must support housing delivery, job access and well-functioning urban areas. This requires early planning, clear priorities, and commercially realistic delivery models. We encourage continued collaboration between Infrastructure Victoria, government and industry to ensure infrastructure investment is well targeted and practically implementable.

UDIA encourages Infrastructure Victoria to consider this feedback and welcome further opportunities for collaboration. If you wish to discuss any of the matters raised in this submission, please do not hesitate to contact UDIA CEO, Linda Allison, ████████████████████ Director of Policy, Jack Vaughan, at ████████████████████