

CITY OF GREATER GEELONG

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25 May 2023

Dear [REDACTED]

**Re: Ideas for Victoria's 30 Year Infrastructure Strategy**

Thank you for the opportunity to provide input to Infrastructure Victoria's preparation towards an updated 30-year Infrastructure Strategy. We commend Infrastructure Victoria on its work providing expert advice to the Victorian Government.

By way of context, infrastructure is a critical issue for the City of Greater Geelong which is experiencing strong population growth and is expected to grow from its current population of around 270,000 to 396,000 by the year 2041. Timely provision and more efficient use of all types of infrastructure is vital to support land supply for housing, as well as liveability, equity and sustainability of new communities.

We have organised our response around the following themes:

- The Victorian Government must recognise Geelong as Victoria's second city, with greater state focus and investment in infrastructure for the city.
- Better sequencing and certainty of infrastructure and service delivery is required to support strong population growth occurring in regional growth areas.
- Inequality and disadvantage must be key factors for prioritising investment in infrastructure and services, recognising areas of significant locational disadvantage.
- Infrastructure planning and decision making must directly support the state's goal of achieving net zero carbon emissions by 2050.

This submission refers to both infrastructure and services, recognising that decisions on services are key to how infrastructure is utilised.

**The Victorian Government must recognise Geelong as Victoria's second city, with greater state focus and investment in infrastructure and services for the city**

The population of the City of Greater Geelong (the City) is currently 283,000 with the potential to increase to nearly 400,000 by 2041.

We acknowledge and appreciate the numerous references to Geelong and other major regional cities in *Victoria's infrastructure strategy 2021-2051* however we urge Infrastructure Victoria to go further in the next version of the strategy, recognising

Geelong's unique status as Victoria's second city and the sustained demand for housing in regional locations that is now part of our settlement patterns and therefore requiring an even higher level of focus and investment.

To fulfil its potential as Victoria's second city, support our rapidly growing community, and contribute to the economic success of the greater region, the following must be a priority:

- Facilitate the delivery of infill housing and public realm investment in Central Geelong to continue the evolution of Central Geelong to become a diverse, high-amenity city centre.
- Strengthen critical road, rail and channel links for port activities and related industries to enable the port's growth and the support function it plays to the broader region. Investment in freight route upgrades on Fyans Street, Breakwater Road, Boundary Road and Fellemongers Road South Geelong are critical to diverting heavy vehicle traffic from Central Geelong and improving freight connections.
- Secure the land and transport connections for Bay West port development. There is sustained interest in development in the corridor between Geelong and Werribee and securing land now for the long-term development of the port is vital. Understanding the cultural and environmental significance of the coastline in the short term is critical.
- Improved access to Avalon Airport from Melbourne, Geelong and regional areas is vital. In the short term, a public transport service to the airport from Lara Station should be delivered and a long-term plan for the form and timing of the Avalon Station established.
- Increased support for nature-based and First Nations tourism. Geelong and the Bellarine attracts 6.4 million visitors annually. The strength of our tourism sector is in the natural environment. Expansion of the recycled water network on the Bellarine and the wider region would further enhance the agricultural production and contribute to the protection of the green breaks between urban settlements.

We note a number of IV's recommendations in *Victoria's infrastructure strategy 2021-2051* that relate to Melbourne's urban renewal or greenfield growth areas should be extended to Geelong. These include Recommendations 32 (Produce public plans for priority infrastructure sectors), 72 (Prioritise and oversee infrastructure delivery in growing communities) and 73 (Fund libraries and aquatic centres in growth areas).

Regional areas such as Geelong are excluded from key funding sources available to Melbourne's growth areas such as the Growing Suburbs Fund. We recommend these funding sources be made available to all major regional growth areas.

As an example, the City is currently experiencing significant gaps between the development contributions and true cost of community hubs in Geelong's growth area. In one community hub project in the Armstrong Creek growth area, the City has collected \$11m from the development contribution plan, however the estimated cost for the hub is now \$22m as a result of material and labour cost escalations. Whilst grants are available to support the early years components of a community hub, no funding is available for multipurpose community spaces that are integral to a new community's development. The Living Libraries Grant regularly funds less than 10 per cent of an overall build of a library (Boronggook Drysdale Library – total cost \$9m, Living Libraries contribution \$1m) and

with cost escalations, the State Government is only contributing around five per cent of a total cost of a facility through the Living Libraries program.

To summarise our feedback under this theme, we recommend that:

- IV explicitly recognise Geelong as Victoria's second city in the next infrastructure strategy.
- State-level infrastructure planning for the Geelong region be prioritised to ensure that population growth is supported by the necessary infrastructure investment.
- IV recommendations in the current infrastructure strategy relating to key growth areas in Melbourne be expanded to Geelong and other major regional growth areas.

### **Better sequencing and certainty of infrastructure and service delivery is required to support strong population growth occurring in regional growth areas**

A significant challenge for the City is ensuring delivery of all types of infrastructure to support population growth, particularly in the growth areas. The City strongly supports integrating transport planning and land-use planning and increasing transparency in the infrastructure planning process.

Integrated transport and land-use planning is hamstrung by the cautiousness of the government departments to share ideas and options on infrastructure investment. Land should not be rezoned for urban development until there is an agreed infrastructure strategy, particularly for transport infrastructure that is aligned to the objectives of the region.

Current practice sees the local planning authority leading the infrastructure planning process and leading the sustainable development agenda. There is a high degree of uncertainty on the timing and form of state infrastructure that will support the new communities. Public transport planning is the most critical gap.

There is a high degree of uncertainty now regarding the settlement planning priorities of the Victorian Government. There is a high demand for housing in regional locations now due to changes in settlement patterns and relative housing affordability. The uncertainty around the Victorian Government's commitment to continuing infrastructure investment in greenfield areas is preventing transparent and robust strategic planning being delivered. This will be at the detriment of future communities and maintaining housing supply.

For Geelong, the rollout of planned infrastructure and services for the Armstrong Creek growth area, that will be home to 60,000 residents, is dragging on and negatively impacting the liveability of the city. Despite the Victorian Government preparing a bus delivery plan for the growth area prior to development, the first bus service was not delivered until nearly 10 years after the first residents moved in. Current infrastructure upgrades such as the duplication of the Barwon Heads Road are not delivering sustainable transport solutions without adequate bus services and will further cement the community's reliance on cars. The Victorian Government's planning and delivery of the Armstrong Creek Transit Corridor has stalled. This infrastructure and service should be a critical component in the success of the Commonwealth Games, servicing thousands of visitors and reducing the impact on the commuting community but will not be delivered. The land is preserved for this route.

The delivery of the arterial road link between Surf Coast Highway and Barwon Heads Road is holding back the much-needed release of critical employment land to support the economic functioning of this community and the southern part of the city.

To meet our long-term housing needs, the City has developed the Northern and Western Geelong Growth Areas (NWGGA) Framework Plan which has been incorporated into the planning scheme and provides strategic direction for these growth areas which will ultimately accommodate 110,000 new residents. The NWGGA Framework Plan sets out ambitious directions for these growth areas to achieve better outcomes in terms of liveability and sustainability.

The delivery of the new growth areas includes provision of the dedicated mass rapid transit corridor. The City is pursuing early delivery of this infrastructure to facilitate mode shift to public and active transport. Integrated transport and land-use outcomes cannot be delivered without the commensurate commitments from the Victorian Government to the timely delivery of public transport services.

There has been significant investment in the service frequency and reliability of the rail network in Geelong in recent years. The high-quality service and free car parking facilitate easy access to employment opportunities in Melbourne. With the sustained spatial growth of the city to the north and west, access to the rail network by private vehicle will not be achievable. A competitive bus network that provides access to the key employment locations such as Central Geelong and the rail network are critical to long-term economic success and amenity of Geelong. The delivery of a rapid bus network would further support infill housing opportunities in Geelong's established suburbs and could be extended to rapidly growing Bannockburn.

A comprehensive review of the bus network and upgrade of the services as outlined in the Victorian Bus Plan must be a priority for infrastructure investment to support both infill and greenfield growth. Investment by the private sector in early service delivery is prevented by the lack of a clear process and timelines for the rollout of supporting public transport infrastructure and services for new communities to support land-use change and establish sustainable transport behaviours early in the life cycle of a new community.

The City believes that a review of the overarching infrastructure contributions funding arrangements in Victoria is necessary. We do not have a preferred model. To make an informed decision on the preferred infrastructure charging setting, a holistic review of the infrastructure charging arrangements from individual planning permit requirements for local infrastructure upgrades, development contributions charges to value capture mechanism for rezonings and development approvals should be undertaken. This exercise should clearly define the objectives and the statutory tools available for funding both state and local infrastructure in all metropolitan and regional settings. A review of infrastructure contributions should be linked to settlement planning to ensure that we are sending clear signals to the market about the subsidy that will be provided to new development by way of government investment in community infrastructure.

The social and economic benefit, opportunities and cost of large-scale investment in major infrastructure projects such as high-speed rail to regional areas and major road upgrades must be carefully considered. We would welcome a transparent process from the Victorian Government to fully understand the costs and benefits of all major projects for regional Victoria.

To summarise our feedback under this theme, we recommend that:

- IV recommend that the establishment of a clear process and timelines for the rollout of supporting public transport infrastructure and services for new communities to support land-use change and establish sustainable transport behaviours early in the life cycle of a new community.
- Create flexibility in the infrastructure funding programs to enable investments in infrastructure capacity upgrades that leverage investment from private sector and local government investment.

**Inequality and disadvantage must be key factors for prioritising investment in infrastructure and services, recognising areas of significant locational disadvantage**

City of Greater Geelong has the need for approximately 17,000 social housing units by 2041 which is approximately 10 per cent of all future forecast dwellings to be delivered in the municipality<sup>1</sup>. In 2016, the demand for social housing (unmet need) was 10,400 units in Geelong, with only 3300 social housing units available. The need for social and affordable housing translates to an estimated \$6.8b (based on average cost per dwelling) required as capital investment or funding in the next 20 years.

The provision of social housing is an essential social infrastructure item and critical to the social and economic success of a region. The provision of social housing should form part of the infrastructure planning for new communities and be a product of the urban development process. The City supports the creation of inclusionary zoning provisions to facilitate the supply of social housing. The current voluntary system of contributions from development will not deliver a meaningful increase in the supply of social housing.

The City of Greater Geelong needs the rapid renewal of aging public housing. The suburbs of Corio, Norlane and Whittington include high proportions of aging social housing, particularly three-bedroom dwellings that no longer meet the needs of the community. Areas with existing and planned concentrations of social housing requires delivery of social and economic infrastructure investments ahead of time that co-locate jobs, transport and access to services to support the community.

A long-term pipeline of subsidy for social housing delivery is essential to provide incentive for local government and for purpose and private sector to invest. The Social Housing Growth Fund should be a long-term program of investment.

Recommendation 88 (multipurpose shared services) and 99 (updated community infrastructure) are priorities for the City. We agree that “*Victorian Government should undertake shared service planning to identify service need, the facilities and services suitable for shared use, the location and facility design for infrastructure delivery.*” The Victorian Government should be a leader in this area, to build the capacity of local government to deliver shared service planning and facility design.

Local government needs support and subsidy to fund expensive shared facilities, given their proven health and wellbeing benefits for communities. We note that upfront building costs of shared facilities can be more expensive than single purpose facilities but can generate efficiencies through scale and shared maintenance. With flexible design, shared facilities can adapt more readily to changing needs compared with single purpose facilities. The City urgently requires the establishment of a ‘standard’ of provision to

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<sup>1</sup> Geelong Social Housing Plan 2021 -2041

reduce the amount of push back from the development industry in community infrastructure inclusion in DCPs.

With the introduction of pre-prep and free kinder through the 'Best Start Best Life' reforms, the Victorian Government must urgently:

- Update planning guidance such as *the "Planning for Community Infrastructure in Growth Areas – ASR Research, 2008"* to establish kinder provision benchmarks to guide locally prepared community infrastructure plans. It is imperative that these provision ratios consider factors such as accessibility, community need, level of disadvantage, affordability and capacity in addition to population benchmarks to guide equitable kinder infrastructure delivery in both growth and established areas.
- Increase the amount of grant funding available to local government to deliver kinder infrastructure required as a result of the reforms, and also provide funding towards the long-term maintenance of such infrastructure.
- Clarify the expected role of local government in kinder Infrastructure provision and maintenance, given the move towards kinder infrastructure being provided at government and non-government school sites, and delivery of 50 government owned and operated childcare centres across Victoria.

To summarise our feedback under this theme, we recommend that:

- That social housing is considered as a social infrastructure item and funding certainty is provided to the development sector.
- Facilitate the delivery of shared-use community infrastructure.

### **Harnessing innovation and emerging technology to drive transport advancements**

The rapid rate of innovation and the emergence of new technologies in the transport space is seeing significant investment from governments, private companies, and venture capitalists. The potential impact has created a competitive landscape where global investors are eager to support and fund promising innovations.

This influx of investment capital has fuelled further research, development, and commercialization in areas such as autonomous vehicles, electric mobility, and smart infrastructure. The strong investment attraction underscores the recognition of its transformative potential and the opportunities it presents for economic growth, job creation, and sustainable development.

The Victorian Infrastructure Strategy (2021-2051) proposed a range of recommendations across the technology and innovation space namely 1.4 (21-25) and in part they seek to operationalise the *Get More From Transport Infrastructure* theme.

In most cases the impact of new innovations is delivered in a silo approach, minimising the impact and delivered sub optimally. A living lab (or innovation hub) is a real-world testbed where innovative technologies and solutions are developed, evaluated, and refined in collaboration with stakeholders to address urban mobility challenges.

Geelong, with its unique characteristics and strategic advantages, presents an ideal location for establishing a designated transport testbed for leveraging smart cities and digital connectivity to transform and enhance the transportation system. The following factors contribute to Geelong's suitability:

- Proximity to Melbourne and city status: Our close proximity offers significant advantages including collaboration and knowledge exchange between academic institutions, industry leaders, and research organizations and access to a diverse talent pool and potential partnerships.
- Existing infrastructure: Our robust existing infrastructure network, including active transport, roads, highways, railways, and ports enables seamless integration of innovative solutions enhancing opportunities for testing and deploying emerging transportation technologies.
- Manufacturing and industrial expertise: Our long history and experience in advanced manufacturing, can lead to the development of cutting-edge technologies, and the existing industrial ecosystem provides a strong foundation for innovation and collaboration within the precinct.
- Research and education institutions: We are home to several renowned research and education institutions, including Deakin University and the Geelong Technology Precinct. These institutions possess expertise in areas such as transportation engineering, data analytics and sustainability.
- Proactive local government: Our City has demonstrated a commitment to innovation and inclination towards fostering smart city initiatives and leveraging digital connectivity to enhance urban services ensuring a conducive environment.
- With more than \$17b worth of capital projects across the city, the support and demand is highly evident.

A dedicated precinct will provide a platform for various stakeholders, including government bodies, policymakers, research institutions, private enterprises, and community organisations, to collaborate and assess the viability, performance, and potential impact of emerging technologies on the overall transport network. It will foster the exchange of ideas, research findings, and expertise, enabling collective efforts to drive innovation in transport planning, design, and implementation. It will attract leading experts, researchers, and technology companies, facilitating collaborative projects aimed at improving transportation efficiency, reducing congestion, job creation, enhancing safety, and promoting sustainability.

Incorporating community engagement is crucial to ensure the use of transport technology aligns with the needs and aspirations of the citizens. The precinct will serve as an avenue for public consultations, workshops, and educational programs, fostering awareness and understanding of emerging technologies, smart cities, digital connectivity, and their potential benefits for all members of the community.

For many years, Geelong has been at the forefront of transport innovation, showcasing a range of initiatives that have positively impacted the city's transportation landscape. A snapshot of initiatives include:

- Dedicate bicycle lanes that promote sustainable mobility;
- Smart parking solutions leveraging technology to optimize parking availability and reduce congestion;
- Embraced shared micromobility services such as bike-sharing;
- Transport data analytics initiatives using big data and computer vision have been started to gather insights and enhance decision-making processes; and

- Made significant progress in electric vehicle (EV) infrastructure, with the installation of a growing number of EV chargers across the city supporting the transition to cleaner transportation.

To summarise our feedback under this theme, we recommend that:

- IV recommend the establishment of a transport living lab with a clearly articulated vision and objectives, focusing on fostering innovation, collaboration, and real-world testing of transportation solutions.
- We recommend that Geelong is the ideal physical location that can serve as the testbed due to its infrastructure, connectivity, diverse transportation modes, smart city success and accessibility to support a wide range of experiments and innovations.
- Take immediate action to allocate ample funding and resources to support the establishment of the transport living lab, recognising the rapid evolution of technology in this space.

### **Infrastructure planning and decision making directly support the state's goal of achieving net zero carbon emissions by 2050**

The City has developed a Climate Change Response Plan to guide how we can act as an organisation, and a community, to respond to our changing climate. The key targets established by this plan are for all City-managed operations to reach net zero emissions by 2025, and for our municipality to reach net zero community emissions by 2035.

For the 2019 calendar year, emissions from the Greater Geelong community were estimated to be 3,232,000 tonnes CO<sub>2</sub>-e<sup>3</sup>. The primary community emission sources included:

- electricity – 60 per cent
- transport – 21 per cent
- gas – 15 per cent
- waste – 3 per cent
- agriculture – 1 per cent

Recommendation 11 (climate scenarios and carbon value in assessing infrastructure) is critical and should be retained going forward.

The City supports further policy and changes to regulation to provide clarity to government and industry as to how our target of net zero emissions will be achieved. The planning and delivery systems need to work together to achieve this outcome. A state-wide approach to environmentally sustainable design requirements for new dwellings and utility connections is essential. Individual councils pursuing local requirements through the planning system will not deliver our net zero emissions objective.

Local councils and planning authorities would benefit from the delivery of supporting policy documents and guidance, to establish a consistent approach to infrastructure planning across both established and growth areas such as the delivery of the practitioner's guidelines for the *Precinct Structure Planning Guidelines: New Communities in Victoria* to demonstrate how aspirational outcomes in policy documents such as community infrastructure, 20-minute neighbourhoods, social housing and tree canopy coverage can be delivered on the ground.



Integrated water management (IWM) and consideration of alternative water supply sources will be critical for the long-term success of our region and has the potential to avoid costly infrastructure investment such as desalination. The IWM planning for the NWGGA includes preserving the opportunity to augment the drinking water supply with stormwater, which is currently not permitted by state regulations.

Our community and infrastructure are being impacted by the effects of climate change now. Recent storm events and floods have highlighted this issue. The next version of the strategy should support the need for planning to mitigate the climate change and storm surges. Funding for investment by the local drainage authorities to mitigate flood impacts is imperative. The need for investment and development contributions in established suburbs that are planned to accommodate infill growth is imperative. These projects can contribute to integrated water management outcomes and deliver multiple community benefits. The Victorian Government should take a leadership role in the implementation of planning controls to ensure new development is built in a way that has regard for the latest scientific and engineering information on flooding and sea level rise, much like bushfire planning is undertaken now.

Pedestrian infrastructure is an often-forgotten part of infrastructure planning but very important to the sustainability, health, safety and amenity of a local area and should continue to be a focus in the next strategy. Funding streams to support local government to invest in pedestrian infrastructure should be pursued. Infrastructure such as highways, railway lines and waterpipes are often major barriers to improving pedestrian connectivity. Funding safe crossing points over this infrastructure is beyond the capacity of the local government but can make a significant benefit.

We support delivery of a network of separated cycleways in Geelong. A partnership approach to route identification, design and delivery is required to successfully deliver these projects as these projects can be difficult for many communities to implement. A network-based approach should be encouraged and grant funding available to support suburb or township wide investment to improve connectivity.

The City supports Infrastructure Victoria's direction to build a circular economy for waste and recycling under Section 1.5 of the Infrastructure Strategy.

Improvement of waste and recycling infrastructure was highlighted in the Strategy. The City would welcome partnership and further support from the Victorian Government to develop local waste and recycling processing facilities in the Geelong region.

The City's Anakie garden organics composting facility has significant opportunity to expand and upgrade to recover food organics. The volume of recyclables generated in the Geelong region and our distance from major recycling facilities have highlighted the need to establish regional recycling infrastructure. Hence all landfills in the Geelong region will reach their end-of-life in 5-7 years. Unless new waste disposal facility is established, the region will need waste transfer facility to bulk haulage general waste to disposal sites outside the region.

The City acknowledges the investment in the multi-year Digital Twin Victoria Program. The program has provided a range of important datasets. There remains a number of important gaps including the need to create high-quality, high fidelity 3D building models for a more comprehensive and accurate digital twin of the city. By creating a more detailed and granular digital twin of Geelong's built environment, the city can not only better understand and manage its physical assets, infrastructure, and services - but support rapidly rising innovations such as rules-as-code. With a large majority of

developers and architects working in three dimensions. This investment will also reduce the costs of the private sector by providing useful context information for developments and encouraging the use of consistent standards (coordinate frames, terrain models and key attribute information).

To summarise our feedback under this theme, we recommend that:

- IV recommend further intervention and leadership from the Victorian Government on the planning, investment and delivery of infrastructure and urban development that aligns to the state's vision of achieving net zero emissions.
- IV recommend continued leadership in the digital twin space and that some grant funding be allocated to local councils to focus on local problems and initiatives.

#### **Enhancing emergency response through computer vision collaboration: leveraging local councils and transport camera networks**

The use of closed-circuit television (CCTV) by emergency responders play a crucial role in providing real-time surveillance and situational awareness and enhancing public safety and emergency response capabilities. Its importance was detailed in Recommendation 27.

The current approach across local and state government requires significant investment, policy setting and governance. In its current form there is limited sharing of data between the two tiers of government and represents a lost opportunity.

The availability of high-quality video footage, coupled with advanced video analytics, can aid in identifying potential threats, monitoring crowd movements, traffic planning and assisting in post-incident investigations. A collaboration between emergency responders, local councils, and transport camera networks exemplifies the power of technology and multi-agency cooperation in ensuring public safety and effective emergency management, however it remains largely unstructured and is inconsistent.

We recommend that:

- There is greater collaboration between government agencies in sharing CCTV data feeds.
- IV recommend the Victorian Government commit to the responsible and transparent use of artificial intelligence (AI) when deploying computer vision algorithms.

We would welcome the opportunity to discuss any aspect of our submission further with IV and look forward to participating in further engagement to inform the development of Victoria's next infrastructure strategy.

If you would like any further information please [REDACTED]

Yours sincerely,

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