



# Transit Precincts: **Perth,** **Get** **Onboard**

**TRANSIT ORIENTED  
DEVELOPMENT**  
RESEARCH REPORT

Prepared for



## Acknowledgement of Country



We respectfully acknowledge the Whadjuk Noongar people, who have been the Traditional Owners of the land where we work for thousands of years.

We pay our respects to the Elders past, present and future, for they hold the memories, the traditions, the culture and hopes that, through meaningful connection, we aim to apply to the design and planning of better communities in the future."



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Not every station is going to be a TOD. We need to bring the rail to areas of density and diversity, not the other way round.

Interviewee



# Foreword

**Sandra Brewer**

WA Executive Director  
Property Council WA



DESPITE EXTENSIVE THOUGHT LEADERSHIP, PERTH HAS NOT PROGRESSED FAR DOWN THE PATH OF DELIVERING GENUINE TRANSIT ORIENTED DEVELOPMENTS, OTHERWISE KNOWN AS TODS.

As cities grow, the opportunity – and challenge – is how to accommodate a high-quality environment to support population density.

Urban and infrastructure planning experts recognise that the optimal approach to facilitate population growth is to build housing, employment and services around public transport systems. Essentially, to promote Transit Oriented Developments (TODs).

METRONET and the state government's investment in a series of new rail lines and stations are commonly held up as the solution, however the question is whether these locations have sufficient maturity to support intensive TODs in the short-term.

This research report was commissioned by Property Council WA to investigate the potential for TODs around Perth train stations.

It builds on our understanding of the principles of successful TODs – recognising that METRONET may provide long-term opportunities, but that there are more suitable options now. The report illustrates 'where it would work now' and makes recommendations for policy planning and implementation methodologies necessary to make TODs a reality in coming years.

The collaborative research included a review of past studies, case study examples, an industry survey and key stakeholder interviews to provide insights into best practices, planning and policy implications, and the most suitable locations for TODs.

Through the research, we have engaged with many in both the property sector and government departments to identify how Western Australia's current planning system and/or department responsibilities need to adapt to deliver TODs.

The findings of this research will, I have no doubt, cause us to reflect on how we can create opportunities for investment and generate high-quality outcomes which will set a new benchmark in TODs for Perth.

I wish to acknowledge the contribution of the Property Council WA committees, members and stakeholders who generously donated their time, expertise and experience in developing this research. I also wish to express my thanks and recognise our research team Taylor Burrell Barnett and SMEC.

### **Research Objectives**

Taylor Burrell Barnett and SMEC formed a project partnership to respond to Property Council WA's brief to identify innovative ideas and thought-leadership, to inspire and advocate for change in the delivery and development of METRONET and TODs in Perth.

The research paper objectives included:

- Build understanding of principles of successful TODs through case studies and investigations.
- Engage with industry stakeholders through a survey and series of interviews.
- Identify key considerations for future planning frameworks, including land assembly, feasibility criteria, amenity and service provision, and industry collaboration.
- Identify suitable locations in the Perth Metropolitan Region and show a map of where TODs are most likely to work.
- Provide recommendations that are clear and actionable for government.

# Executive Summary

TRANSIT ORIENTED DEVELOPMENT AIMS TO DELIVER WALKABLE COMMUNITIES AROUND TRANSPORT NODES TO PROMOTE SUSTAINABLE URBAN GROWTH.



TODs can be high-rise mixed-use developments or small-scale infill projects. Proponents say TODs are a sustainable way to manage growth, improve public health, reduce energy consumption and ultimately increase property values. However, opposition to density, inflexible planning frameworks, and lack of amenity can deter or affect feasibility.

This research collaborated with the private sector and government agencies involved in planning and delivering urban development to find out how we could do things more effectively in Perth. It was the first time that so many in the private sector had been engaged in research of this type, and their inputs provided vital insights for the future.

**+** in brief

Government's investment in METRONET has created a considerable number of potential TOD precincts; but not all METRONET sites will have the necessary ingredients for successful TOD creation - at least in the short to medium term. This research sought to uncover where we should focus our immediate attention.

Areas considered most attractive for early redevelopment have been identified in the survey results and interviews. These findings have been backed up by literature and research, which, when combined, suggest inner city locations in Perth and established high-amenity locations along the heritage train lines are the most attractive choices.

Within the METRONET system longer term opportunities exist, but these areas require an alternative approach to facilitate interim land uses and short-term activation in the various precincts until such time as the levels of amenity and desirability support intensification. The market is likely to wait for the right conditions to develop in these locations.

Lessons learnt from around the globe suggest that greater collaboration between all sectors and the community is a critical factor in successful TOD delivery as it will underpin planning, design and delivery.

## Our key recommendations

### HOW CAN PERTH GET ONBOARD?

View more key findings from our engagement approach [page 26](#).



#### VISION

The state government needs to set and promote a clear vision for appropriate density in station locations that is well communicated to local government and the wider community. This should include a focus on priority locations for TODs, creating precincts where people want to live.



#### ACCOUNTABILITY & CONSISTENCY

Hold local government accountable for achieving their infill targets with TODs in identified priority locations. With state government as the lead agency, set the planning framework to ensure consistency in delivery of infill and decision making.



#### COLLABORATION

Connect government, property investors and communities through inclusive precinct planning to get people on the same page, and to create viable, implementable projects.



#### INVESTMENT

Create financial incentives, and consider partnerships, to make TODs attractive to property investors and de-risk developments as much as possible, especially essential service provision. Consider releasing a wide range of land parcel sizes and tenures to enable boutique, as well as large proponents, to get involved.



#### PLANNING INTERVENTION

Prioritise the need for robust, holistic planning frameworks with a precinct, wider district or whole of line focus, and planning reforms to deliver fast, concurrent and flexible development approvals.



#### PEOPLE FOCUS

Recognise that more needs to be done to make TODs an attractive, high amenity option for people to live and visit.



#### SOLVE BIG ISSUES

Consider planning for TODs alongside the big issues like affordable housing, high construction costs and servicing capacity.



#### LAND USE

Better integration and flexibility with surrounding land use to ensure higher levels of amenity, connectivity and sociability.



# TODs: Priority Locations

## Where could TODs work now?

OUT OF THE TOP 10 LOCATIONS WHICH EMERGED FROM THE SURVEY AND INTERVIEWS, WE HAVE IDENTIFIED FIVE PRIORITY LOCATIONS FOR TODS IN PERTH.

See more on these priority locations on [page 32](#).

### Leederville

#### TRAIN LINE

Joondalup

Leederville has an “urban village” atmosphere, with activity in the centre throughout the day. The land values are strong, which encourages developments. The local community is very engaged in local planning.

#### SUCCESS FACTORS



See success factors key on [page 13](#).

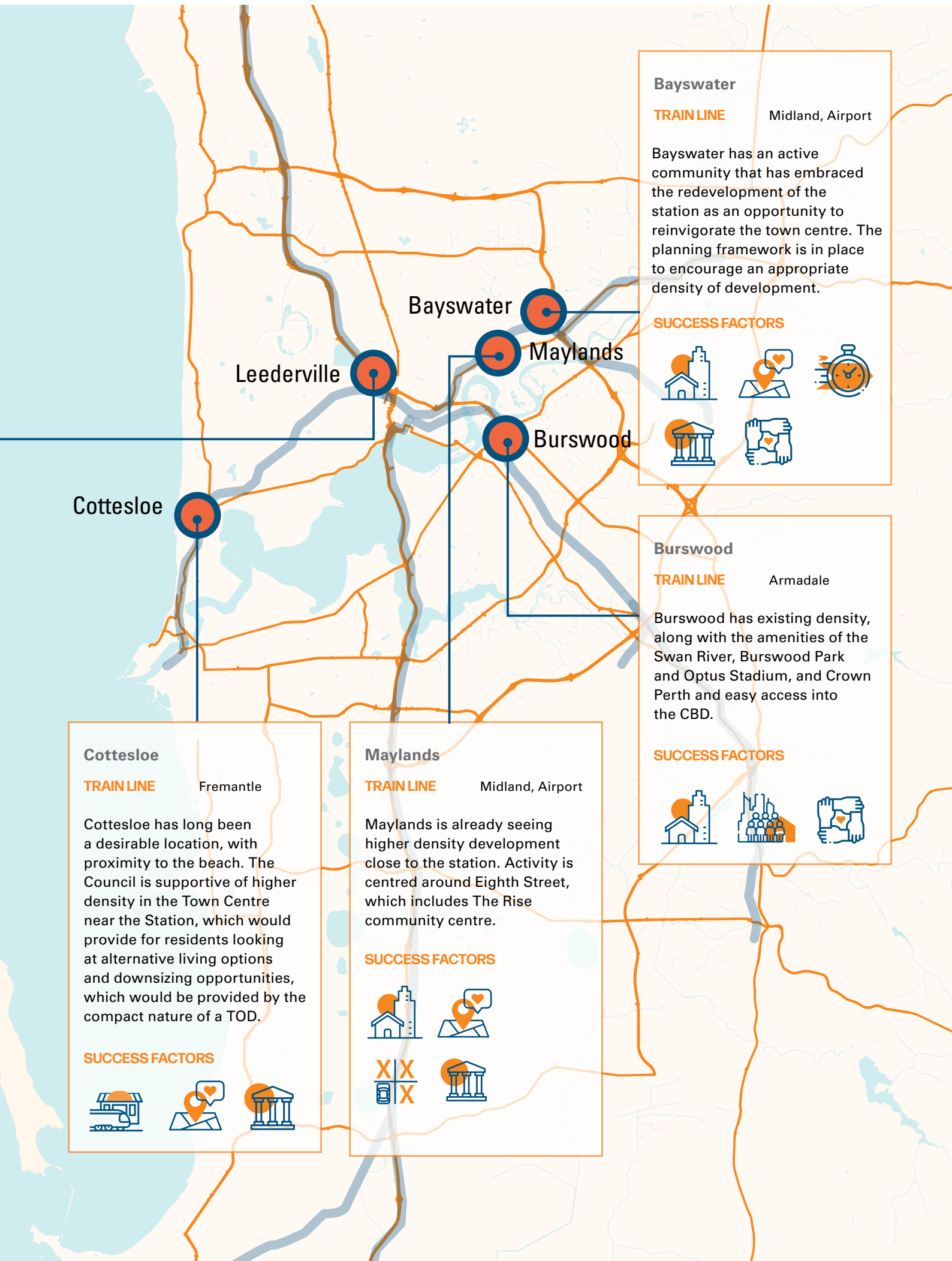


Find the places that have a strong heart and plan transit precincts there.

Interviewee







# Why TODs?

## Why TODs are so important as part of the urban fabric



### What happens when we do TODs:

- Improved land use integration and walkability across the TOD precinct and further afield. This sees connection to education, employment, recreation and other destinations and activity centres within the metropolitan region.
- Increased public transport patronage, which may reduce commuting and general travel time and cost.
- Amenity uplift encouraging walking, cycling and public transport use, with beautification of the streets and public domain.
- Improved urban productivity, with clustering of well-placed densities, activities and jobs particularly in the knowledge economy sector.
- Economic efficiency gains from saving costs in services and infrastructure (such as energy, water, transport, health, education and social services).
- Environmental gains by reducing high automobile dependence, and reducing greenhouse gas emissions, air pollution, and traffic-related accidents. Assists our transition to net zero.
- Housing supply and diversity, for all life stages. More supply makes housing more affordable.



### What happens when we don't do TODs:

- Detrimental urban outcomes and sub-optimal public transport outcomes.
- Greater pressure on our road network.
- Challenges to optimal density of development in the absence of good public transport services.
- Reduced walkability and amenity in the station catchment area.
- Increased car dependency as without frequent and reliable public transport, people will always default to using cars. Even when public transport improves, people's habits are hard to change.
- Rising carbon output.



You don't build railway lines for transport outcomes, you build them for land use outcomes.

Interviewee





# Principles of Successful TODs

## What makes TODs successful?

During our research and engagement, a number of key factors have emerged as key to successful transit oriented developments. These are the 12 principles of successful TODs:

- 1 Requires integrated urban land use and transport planning.
- 2 Contains a rich diversity of residential (including affordable housing), commercial, and retail uses at higher densities (but not at the highest density). This mix is appropriate for the location and provides a high level of amenity within a comfortable walking distance for residents and visitors.
- 3 Is of a sensible scale and density that reflects its TOD hierarchy, and market positioning which aims to provide flexibility and encourages a variety of development intensities and heights that meet the aspirations and goals of the precinct.
- 4 Reduces the primacy of cars and focuses on inclusive design which caters for pedestrians and bicycles and has full access for people with disabilities and the elderly.
- 5 Maximises connectivity by rail and high frequency bus routes to a range of work, shopping, and other urban activities, particularly for those who do not have access to a car.
- 6 Offers a superior commuting experience. A high-quality transit service is characterised by frequent and dependable arrivals and departures, and a clean, safe, and appealing station environment.
- 7 Supports potential for increased sustainability and for whole of life living where the transit system is well linked to other locations.
- 8 Acts as a liveable destination that attracts people to live, socialise and work within the precinct.
- 9 Prioritises the experience of residents and visitors with healthy streets and public spaces through good signage, seating, street furniture, art, site-sensitive landscaping and shelter.
- 10 Avoids expanses of open parking areas.
- 11 Considers the original character and community values of the location prior to the intensification of densities and heights.
- 12 Is embraced by the existing community as a result of consultation being sought throughout the journey.



Subiaco

### Success factors

1



**Integrated**  
urban land use

2



**Rich diversity**  
of residential,  
commercial and  
retail

3



**Sensible scale**  
and **density**

4



Caters for  
**pedestrians and**  
**bicycles**

5



Maximises  
**connectivity**

6



Superior  
**commuting**  
experience

7



Increased  
**sustainability**

8



**Liveable**  
destination

9



**Healthy streets &**  
public spaces

10



Avoids expenses  
of **open parking**

11



Original **character**  
and **community**  
values

12



Embraced by  
the existing  
**community**

## How are good TODs implemented?

OUR RESEARCH HAS HIGHLIGHTED THAT THERE ARE SOME FUNDAMENTAL STRATEGIES THAT SHOULD BE IN PLACE FOR SUCCESSFUL TODS TO BE IMPLEMENTED AND ESTABLISHED.

### Take a whole of site and long-term approach

Given the 20-30 year timeframe it is necessary to consider what will be required over the lifecycle of a TOD project not just on day one when the station opens. Planning needs to be undertaken which accounts for the likelihood of changes over time in demand, in engineering services and technology innovations, community infrastructure and mix of land uses. Taking this whole of project lifecycle approach presents challenges as well as opportunities.

### Plan for the demand lifecycle

Demand can change over time. The art of property development is always about predicting what demand will be in 3-5 years. Planning for a TOD precinct needs to consider the potential demand dynamics over 20-30 years. This is very challenging and requires a highly adaptable approach. The modelling that underpins the TOD must be flexible so that inputs can be scenario tested and changed over time.



### Use frameworks to guide the approach

- **Framework** of shared community vision and project feasibility to give shape and life to the TOD in a holistic and cohesive manner.
- **Amenity** to support the creation of urban character that fosters investor enthusiasm towards infill developments.
- **Serviced land** to ensure the availability of reticulated services and capacity of services for land to undergo infill development.
- **Placemaking** via public investment to strengthen the attractiveness of the TOD that reflects local needs, local character and identity.
- **Transport** which prioritises accessibility and improvements to the wider public transport network infrastructure.



MANY STUDIES HAVE BEEN DONE ON TODS AROUND THE WORLD INCLUDING A FEW THAT HAVE FOCUSED SPECIFICALLY ON PERTH.

IT IS INTERESTING THAT MANY OF THE ISSUES MENTIONED NEARLY TWO DECADES AGO, ARE STILL RELEVANT TODAY.

## Learnings from Western Australian research and previous studies on Perth

### Transit Oriented Development in Western Australia: Attitudes, Obstacles and Opportunities, PATREC, J L Renne, 2005

Recommended some key initiatives to strengthen TOD policy and implementation in Perth:

- Better branding for TODs.
- A central transport and land use strategy with targets.
- A TOD Code to guide the statutory planning process in TODs, including parking policy.
- Community participation in local visioning processes and the streamlining of development approvals where they conform with the vision.
- A financing strategy, including an income stream to assist transit investment and land assembly.
- Local and state government partnerships for implementation.
- State government facilitation of TOD education advocacy.
- A plan for affordable housing in TODs.
- Linking TOD development to new education, public health and other public buildings.
- A plan for tracking TOD outcomes.

**READ IT HERE**

### METRONET Station Precincts – An Industry Perspective on Making Them Happen, Property Council/ Urbis 2018

The report included case studies of local and interstate station precinct developments and found that:

- Those areas which offer the greatest potential for density are often the most resistant to change.
- Inconsistent local planning rules are a major threat to METRONET.
- A new state government led 'precinct' planning system is required to provide the community and industry with a fair and consistent process for managing the local planning process.

**READ IT HERE**



### Progress towards a new state government led 'precinct' planning system

There has been progress in this regard with Improvement Plans and Redevelopment Schemes prepared by state government for some of the METRONET station areas, and some proactive local governments are progressing Precinct Plans for existing station precincts. However, as our engagement findings suggest there is still a level of inconsistency and many of the potential TOD locations remain unplanned. There are also clear interrelationships between stations on the same line which begs the question whether a whole of line planning framework is required which set high level objectives and requirements for more detailed precinct planning.

### Overcoming the Barriers to Transit Oriented Development, J Bolleter, Z Myers, P Hooper, 2022

Six potential strategies were identified to overcome barriers to successful implementation:

- Integrate stations with surrounding TOD precincts.
- Plan strategically for specific origins and destinations within the transit network.
- Strengthen state government leadership and introduce TOD redevelopment areas.
- Diversify genuine active and public transport options for TOD precinct.
- Attract critical mass of community into the TOD precinct.
- Communicate unique benefits and trade-offs of TOD density.

# Best Practice Case Studies

Case study 1:

Jerong East Metro – JEM

Singapore



THE FIRST LIFESTYLE HUB IN SINGAPORE'S WEST WHERE SHOPPING MEETS ENTERTAINMENT; FUNCTIONALITY MEETS EXPERIENCE AND WHERE COMMUNITY CULTURE MEETS CITY INSPIRATION.



## Key success factors



## Fast facts

<b>SITE AREA</b>	Approximately 54 Hectares in the Jurong Lake District
<b>LAND USES</b>	Residential Commercial Health Education Shopping Centre Mixed Use Elevated pedestrian network
<b>TIMEFRAME</b>	2008 - 2014
<b>SCALE</b>	241 apartments, 76,000 square meters of retail space on six levels, comprising a large cinema multiplex, flagship department stores, food courts and specialty retailers.
<b>TRANSIT SYSTEMS</b>	Heavy Rail (including an international connection) Bus

## Success factors

- Four years from commencement to completion for this globally significant investment project.
- Services the wider Jurong Lake District with the JEM TOD directly servicing the hospitals, retail and community facilities via an elevated pedestrian network.
- Two through-block integrated pedestrian links that are open 24 hours at ground level, urban life happens both at ground level and elevated at level 2, giving legible and safe wayfinding and convenience access.
- Pedestrians are led to the greenery filled outdoor public spaces, linking the retail podium to the offices above.
- Privately owned building integrated into the MRT station.
- Provides an anchor and catalyst for further, future development including plans for Singapore's second CBD in Jurong Lake District.
- Singapore's third largest suburban mall housing 250 units over 580,000 square feet of retail space across six levels.
- Green spaces and rooftop gardens tiered across Levels 5 to 7. Jem Park is a cascading sky park concept.
- Jem Play, a honeycomb-themed playground located at Level 5.
- Jem Street offers street side shopping and al fresco dining.
- Jem Market is a foodie's paradise at Basement 1, complete with food stalls, cafés and restaurants.

## Lessons learnt

- Lendlease has partnered with numerous government departments in pioneering productivity and sustainability initiatives.
- Mix of housing near employment centre and leisure and education to reduce the need to travel to and from the city.
- Strong connections to and visibility of land uses
- Integrated and enhanced convenience of access for communities to transportation, services and amenities.





## Case study 2:

## New Lynn

Auckland, New Zealand

A PUBLIC-PRIVATE PARTNERSHIP CREATING A UNIQUE, SUSTAINABLE, URBAN PLACE CENTRED ON A WORLD CLASS TRANSIT INTERCHANGE.



## Key success factors



## Fast facts

<b>SITE AREA</b>	Approximately 450 hectares
<b>LAND USES</b>	Residential Commercial Civic and Institution Shopping Centre / High Street / Retail Mixed Use Olympic Park, Whau River
<b>TIMEFRAME</b>	2010 - 2030
<b>SCALE</b>	Planning for 20,000 people within a 10-minute walk of the station
<b>TRANSIT SYSTEMS</b>	Heavy Rail, which was lowered into a trench as a catalyst for redevelopment and connectivity Bus interchange with the rail
<b>JOBS</b>	Planned to have 150 FTE jobs per hectare  New Lynn was originally an industrial area but as these businesses have shut down revitalisation of the area was proposed

## Success factors

- New Lynn TOD has had a focus on amenity and quality streetscaping with an emphasis on pedestrian connection.
- Its location on the Whau River provides easy access to Olympic Park with its amenity and walking trails, which is similar to Burswood, Western Australia.
- This level of redevelopment can be successful when it is considered on a regional scale, noting that New Zealand has two levels of government, rather than Australia's three.
- A one km long trench, up to 8m deep, enabled the separation of road and rail, eliminating two level crossings to relieve major traffic congestion and improve public safety.
- The integrated bus and train transport interchange allows for better pedestrian and traffic flow around the rail network and more frequent and reliable passenger services.
- Will provide affordable housing close to the centre of Auckland.

## Lessons learnt

- Through a compelling value proposition, the council and its partners have motivated developers to reach standards of development previously unseen in New Zealand.
- Aesthetics have been important, with shared spaces and a distinctive canopy structure to the train station, which provides the station with the desired level of visibility and presence within this significant urban environment.
- The Auckland Regional Transport Authority provided some funding for the New Lynn TOD. This funding included land purchase capped at NZ\$6million (NZTA share \$3 million).
- The TOD has been planned with development happening over a 20 year timeframe.
- Several interdependent and often overlapping phases will progressively move the transformation from a public sector-led to private sector-led endeavour.



# Planning Frameworks for TODs

## Achieving the right level of guidance through planning frameworks

Planning for TODs is influenced by a range of strategic and statutory planning instruments including:

- Perth and Peel @ 3.5 million and the Sub-regional Planning Frameworks - identify activity centres and activity corridors;
- The State Planning Strategy and Local Planning Strategies provide the overarching objectives and actions for delivery;
- Metropolitan Region Scheme, Improvement Schemes, Redevelopment Schemes, and Local Planning Schemes have statutory weight;
- State Planning Policy 4.2 – Activity Centres for Perth and Peel seeks to integrate activity centres with public transport ensuring they contain a range of activities and lower transport energy use. The SPP 4.2 sets an activity centre hierarchy and prioritises public transport and other modes, over car use; and
- Local precinct and standard structure plans provide for major land uses, zones, coordination of key transport and other infrastructure, and staging.

The State/Regional Planning Framework provides a well coordinated hierarchy of guidance and control; however the clarity and consistency of the framework becomes fractured by the highly inconsistent interpretations by the 34 local authorities through their own Local Strategies and Policies. Other state agencies will also often act at odds with the fundamental planning directions.

**Within the Perth and Peel Region, there are, at present:**

- Two region schemes (Metropolitan Region Scheme and Peel Region Scheme);
- 23 local planning strategies, ranging from 2011 (Town of Claremont) to 2022 (Town of East Fremantle);
- 38 local planning schemes, with gazettal dates ranging from 1989 (Shire of Murray LPS 4) to 2022 (City of Mandurah LPS 12). Within the Perth Metropolitan Region only, schemes range from 1989 (Shire of Serpentine-Jarrahdale TPS 2) to 2021 (Swan Valley LPS 1);
- Redevelopment Schemes covering project areas in Perth, Subiaco, Armadale, Midland, Bayswater and High Wycombe; and
- 19 Improvement Plans and 2 Improvement Schemes (Shenton Park Hospital and Ocean Reef Marina).





**You'd love planning frameworks to be in place before you buy a site.**

Interviewee

**BUILDING SUCCESSFUL TOD REQUIRES THINKING BEYOND THE INDIVIDUAL STATION AND UNDERSTANDING THE ROLE EACH NEIGHBOURHOOD AND STATION AREA PLAYS IN THE REGIONAL NETWORK OF TRANSIT ORIENTED PLACES.**

The analysis of case studies for this report indicates that a greater focus on planning for TODs at a regional and district level can help identify common goals and facilitate coordination among the tiers of government, transit agencies, community residents and private stakeholders.

Coordination and collaboration will enhance the likelihood of successful TODs by ensuring that the driving force - the primary objective - is to achieve world class transit oriented communities. This allows stakeholders to achieve high transit ridership, improved connections between people and jobs, and flourishing transit-oriented neighbourhoods, rather than the more narrow goals of agency KPIs.

The role of coordination and leadership of precinct and district scale planning, including the necessary strategies for essential infrastructure provision, should be led by a single agency, such as The Department of Planning, Lands and Heritage in WA.

**Some transit cities, such as London, have put in place some key moves to support TODs, albeit of a very different scale and demand pattern to Perth, including;**

- Recognising that the characteristics and functioning of the stations vary actively, and TOD specific applications significantly differ in form, function and impacts, calling for context-based TOD typologies.
- Recruiting personnel from the property development industry to inform feasibility.
- Assessing the distribution of costs and benefits among stakeholders, including the local community as a priority performance indicator.
- Defining a comprehensive plan, at the regional/district scale to identify public land ownership and future developments around stations, incorporating TODs into long-term planning tools.
- Providing resources, expertise and clear governance to reduce risks on investments in project areas.



## Fast and flexible development approvals processes

OUR RESEARCH FINDINGS HIGHLIGHT THE NEED FOR CERTAINTY, CONSISTENCY AND TIMELY DEVELOPMENT APPROVALS.

Fast and flexible development approval processes have a highly positive bearing on investor confidence. A concerted effort is needed to ensure the planning framework is contemporary, fit-for-purpose, resilient and flexible. The aim should be to foster best practice planning and design outcomes that are capable of being implemented.

Through its paper **Planning to Deliver (Property Council of Australia, Moharich & More, Align Strategy+Projects 2021)**, the Property Council advocates for a number of planning reform priorities including:

### Greater certainty for the public and developers regarding intended built form developments

Proposal 19: The Minister in respect of amendments to Local Planning Strategies, and the WAPC in respect of the approval of Precinct Structure Plans, must ensure that development standards in planning instruments for infill are reflective of the type of the intensity of development contemplated, by increasing as-of-right heights, and reducing the capacity for discretion.

### Address inefficiencies in referrals processes

Proposal 27: Empower and resource government planners to advocate for good applications on planning grounds in their discussions with referral agencies.

Proposal 28: Amend legislation to deem an approval granted under the PD Act as approval under other specified legislation.

Proposal 29: Provide a State-led application pathway for projects that trigger matters of State interest, with an assigned State planner, and an assisted and coordinated referral regime.

### Introduce concurrent planning process approvals for master planned projects

Proposal 26: Amend the legislation to allow for concurrent amendment of various planning instruments, and subdivision and/or development approvals for master planned projects.

### Digital registers of applications and planning instruments

Proposal 33: Government to design a centralised, online planning application platform to be available for all development applications regardless of decision-maker.

Proposal 34: Data collected from this system to be made publicly available.

Proposal 35: A requirement for the status and application of planning instruments, including in preparation, to be made available through a searchable cadastre-based GIS database.

# Integrating land use, infrastructure and transport planning



METRONET is promoted by the government as the catalyst to turn over 8000 hectares of land around new stations into desirable places for investment in housing, jobs and services. The METRONET program includes constructing new rail lines, links and stations, and the commencement of a level crossing removal program along with an associated rail car assembly program, which has recently received a major boost of funding from the 2023 state government budget. METRONET funding has focused primarily on the 72 kilometers of new lines and 23 new stations, and some established station upgrades. However, industry is not clear on the commitment to providing the other improvements to infrastructure and amenity that are often essential to make station precincts suitably serviced and ready for development and is silent on the existing stations and the surrounding precincts along the heritage lines. This is considered to be a critical gap between the significant infrastructure delivered by METRONET and the stage at which the precinct is ready and viable for private investment. Equally the same requirements exist in a number of the other 60 plus stations on the existing rail lines or heritage lines which are currently considered part of the METRONET system but which have a great potential to provide additional housing, employment and facilities to the community.



The integration of land use, infrastructure and transport planning is fundamental to urban growth and no less so in the case of planning and developing TODs.

The establishment of a system to identify and target priority areas for locations requiring infrastructure coordination and investment is needed. Land assembly and delivery of infrastructure upgrades remains a major constraint to facilitating urban infill development including in TOD locations.

The State Infrastructure Strategy provides a long-term vision and infrastructure outlook. Relevant to TODs, several recommendations that are partially or fully supported by the state government should be pursued.

**Recommendation 56:** Deliver improved transport system outcomes by reforming governance arrangements for the Transport Portfolio to achieve planning and delivery across all modes of transport, and reforming funding hypothecation arrangements to fund priority projects across all transport modes.

**Recommendation 57:** Refresh statewide strategic transport planning aligned with land use plans and policies that combines and prioritises all key mode-specific transport planning across Transport Portfolio agencies and embeds a diverse range of non-build, demand management and transport innovation opportunities and scenarios, and station precinct intensification opportunities.

**Recommendation 59:** Develop and implement a public transport patronage action plan with a focus on non-build measures including planning for better connectivity to educational facilities and other activity precincts.

**Recommendation 73:** Enable and diversify social and affordable housing providers and housing choice including leveraging government land assets, including greater opportunities for leasehold tenure, and providing financial and yield incentives to broaden private sector and institutional investment.



METRONET whilst visionary is a transportation option at this time, not a living option.

Interviewee

## Collaboration and partnership opportunities

THE STATE PLANNING STRATEGY PLACES A PRIORITY ON ECONOMIC AND POPULATION GROWTH AS THE KEY DRIVERS OF LAND USE AND LAND DEVELOPMENT WHICH WILL RELY ON A COLLABORATIVE APPROACH TO STRATEGIC PLANNING THAT IS BASED ON A 'CAN DO' ATTITUDE AND AN INTEGRATED 'SYSTEMS' VIEW OF LAND USE PLANNING AND DEVELOPMENT.

Similarly, The METRONET Strategy recognises that development responsibility around train stations will be shared across multiple state government agencies, local governments and the private sector, which will require a high level of coordination to achieve successful outcomes. However, neither Strategy makes further reference as to how this will be achieved.

Improvement plans could be the solution to provide a government framework for effective TOD delivery.

### Formulating a more collaborative approach between Government Agencies

A Public Private Partnership (PPP) is a clear opportunity to generate development in TOD locations. This could be any kind of partnership from contractual, corporate, or collaborative. Around the World, and as evident for the case studies discussed in this report; PPP models are widely used for TOD projects, especially where there are complexities in servicing and activating future land uses.



**We need to consider more creative ways of structuring deals to make developments more feasible.**

Interviewee

In established urban locations, a PPP may take the form of a Special Services District (SSD) or a Business Improvement District (BID) to fund ongoing operations and maintenance costs. This requires a critical mass of redevelopment in the area to be viable.

Projects in less developed or greenfield locations with the potential for PPP are often categorised and selected according to the prevailing conditions. Those with known development and market interest and opportunities to act as a catalyst, but which require assistance to assemble land, deliver services and utilities and coordinate approvals are favoured.

In Western Australia, PPPs cover social infrastructure delivery and engineering contracts. There are also other successful examples through DevelopmentWA in locations such as:

- Alkimos, where a PPP with Lendlease has created a master-planned, coastal community with a major regional centre and coastal village.
- Eglinton where a partnership with Satterley has created Allara a master-planned community of over 2,500 dwellings.

As well as successful examples through local governments including:

- City of Fremantle, where the City, DevelopmentWA and private sector have transformed the Knutsford Precinct, a former industrial area, into a cutting-edge residential community.
- The City of Fremantle in collaboration and partnership with Lotterywest, Minderoo Foundation, Rotary WA, Public Transport Authority and St Pats are undertaking the delivery of housing for the homeless, My Home project, on surplus railway reserve.
- City of Vincent where a partnership with Hesperia has delivered the iconic Electric Lane and ABN development, which is a vital element and one of the many attractors in the Leederville TOD.



A collaborative relationship can be valuable, and is sometimes imperative, to create an environment in which the enabling structure of a TOD precinct can be feasibly delivered.

**Government needs to invest in services and public amenity, but needs the commitment of the private sector to ensure a suitable return.**

PPP models have relevance to the TOD framework especially where government has significant infrastructure requirements and land holdings. They are also important for these projects that will take time to evolve, and where staging is crucial, where alternate land tenures like leasehold are valid and where affordable or essential housing and economic development catalysts including interim land uses and adaptable built form are required.

It is important to remember that whilst an overarching vision is crucial, especially for any long-term partnership that may see changes in the political landscape, a balance of fixed and flexible elements is essential. The market should be able to test development outcomes against a set of government priorities, objectives or parameters for a TOD precinct, without relying on a planning framework to determine the most appropriate land use and development outcome.



# What you told us

## Our engagement approach



Consultation with key stakeholders was an important part of this research project. Our engagement activities included:

- **An online survey** circulated to relevant stakeholders. We received approximately 100 responses
- **Face to face interview meetings** with 35 industry professionals from a range of 20 private and public sector organisations.

### About the Survey Respondents

**Property Owner/  
Investor**  
17%

**Property Developer** 22%

**Property Manager  
/ Agent** 2%

**Government**  
24%






**Finance**  
3%

**Planner**  
18%

**Other Professional**  
26%



## Key survey responses

Questions	Top 3 answers
 <p>When considering the amenity features of new development in TOD locations, how important are the following?</p>	<ol style="list-style-type: none"> <li><b>1. Walkable distance to public transport</b></li> <li>2. Proximity to Activity Centres</li> <li>3. Proximity to parks and open spaces</li> </ol>
 <p>For each of the following site-related barriers, how likely is it to impede TODs in Perth?</p>	<ol style="list-style-type: none"> <li><b>1. Fragmented land ownership</b></li> <li>2. Construction costs</li> <li>3. Lack of consumer demand</li> </ol>
 <p>For each of the following government/system-related barriers, how likely is it to impede TODs in Perth?</p>	<ol style="list-style-type: none"> <li><b>1. Lack of frequent and reliable public transport</b></li> <li>2. Lack of forward planning and limitations of services and utilities</li> <li>3. Lack of government agency coordination</li> </ol>
 <p>For each of the following financial incentives, how likely is it to encourage TODs in Perth?</p>	<ol style="list-style-type: none"> <li><b>1. Stamp duty relief</b></li> <li>2. Land tax concessions</li> <li>3. Lower buy-in costs on government land</li> </ol>
 <p>For each of the following planning incentives, how likely is it to encourage TODs in Perth?</p>	<ol style="list-style-type: none"> <li><b>1. Bonus plot ratios</b></li> <li>2. Opportunities for concurrent approvals</li> <li>3. Reduced provisions/regulation by government</li> </ol>

## Key interview responses

THIS INCLUDES SENTIMENT AND THOUGHTS FROM OUR INTERVIEWS WITH PUBLIC AND PRIVATE SECTOR PARTICIPANTS.



TODs shouldn't be 'one size fits all'. Engage with the community.  
Offer customers choice.  
Speed is everything in planning approvals.

Interviewee



Electric Lane, Leederville - supplied by City of Vincent



### VISION

- Whilst there is general community support for TODs, the state government needs a clear vision for density that needs to be better communicated to local government and the community.
- Recognise that there are significant differences in METRONET and TOD typologies and a range of appropriate densities and land use mixes.
- Messaging to the general public needs to focus on the benefits of encouraging medium and higher density, in the right place.
- Select fewer TOD sites and focus on them, rather than trying to achieve TODs around every train station.
- Certainty of vision drives investment and helps feasibility to stack up.
- Build TODs where people want to live.
- Feasibility around stations in outer sub-regions doesn't stack up due to low land values.
- METRONET - long-term and short-term ambitions require communication between government and proponents.
- Density is difficult to justify in those outer suburban locations.



### ACCOUNTABILITY & CONSISTENCY

- Hold local government accountable for infill targets, through a range of incentives and penalties enforced by state government.
- Address inconsistency in planning decisions in different local governments by offering proponents the choice of an assessment process that is depoliticised, such as Development Assessment Panels (DAPs).
- Rationalise Local Planning Policies to provide consistency across metropolitan local government.



## Infrastructure capacity is vital.

Interviewee



### COLLABORATION

- Government will benefit from frequent engagement with industry.
- Government needs to encourage more participants in the market through collaboration and potential partnership opportunities.
- Collaboration and integration of government agencies across service delivery is essential.
- Greater community consultation at the precinct level, to encourage wider community involvement and advocacy to align with the state government's vision.



### INVESTMENT

- Incentives to make TODs more attractive to developers including: stamp duty relief, flexibility around land acquisition (deferred settlement) and rates holidays.
- Remove foreign buyer surcharge.
- Recognise that only a few can develop large complex sites. Smaller land parcels and de-risking by government would encourage greater competition in the market.
- More creative ways of structuring deals to make developments more feasible.
- Government should build up landholding.
- Need more flexibility around the structure of land acquisition and costs.
- Government should go hard with infrastructure and amenity, to incentivise and de-risk development opportunities.
- Holding costs are significant.
- The Infrastructure Development Fund, an \$80m commitment made by the state government for site headworks, is commendable and should be topped up in future budgets.
- Continue to explore opportunities to better map infrastructure delivery over the long-term.



### PLANNING INTERVENTION

- Robust and holistic planning frameworks at precinct or district, whole of line level (not just a station focus) to demonstrate hierarchy and distribution of land uses and development intensity.
- Hold local governments accountable for planning for infill targets, and add incentives.
- Fast and flexible planning approvals. DAPs working well; local government decision-making is unjustly influenced by vocal minority opponents of change and greater housing diversity.
- Transport infrastructure decisions are sometimes driven too much by engineering considerations and not enough by planning considerations.
- State Development Assessment Unit (SDAU) may need additional resources to achieve required 120-day turnaround time.
- Consider alternate and appropriate planning frameworks to speed up potential for development and land assembly in key locations like the heritage lines.
- Consider appropriate planning frameworks for land around Fremantle line stations.
- There is a tendency to rezone without a pragmatic and realistic strategy for implementation of community benefits, community infrastructure and services.
- Mandated approach (minimums/maximums) slows down development.
- Infill targets for specific sites can actually prohibit development.
- Use caution in mandating inclusion of social or affordable housing, as can have large impact on financial risk.



## Key interview responses (cont.)

**PEOPLE FOCUS**

- More education of the public on the benefits of medium and high density. The WAPC have a leadership role here.
- Revisit Main Roads WA KPIs to focus on moving people rather than moving vehicles.
- Improve amenity of place in station precincts.
- Walking distance and walking comfort to train station is really important.
- Provide benefits to the local community, for example removal of congested train crossings and replacement of old station infrastructure.

**LAND USE**

- Better integration with surrounding land use.
- Flexibility regarding height, density, parking and high rise locations, requires breakthrough thinking - let the market decide.
- Car parking – consider decoupling bays from units.
- Land assembly, available sites and access to finance have an influence on the highest and best land uses.

**SOLVE BIG ISSUES**

- Affordable housing – makes it difficult for TOD feasibility to work, as affordable units are sold at less than cost.
- Very high construction costs. Shortage of materials and skilled resources due to historically high government spending on infrastructure.
- Government to consider spending money on infrastructure when the housing market is 'cool' rather than when it is 'hot'.
- Continue to pursue high levels of migration to provide the workers Western Australia needs to enable all sectors of the economy to thrive.
- Perth planning is still based on car use. Other cities' planning phases focus on public transport use.



Property sector needs more freedom to let the market decide what product should be delivered.

Interviewee



74% of West Australians are not opposed to medium density living; in fact, 60% are either supportive of or open to the idea.

Property Council Research

# Priority Locations

OUR PRIORITY LOCATIONS COMBINE COMMENTS AND INSIGHTS FROM OUR SURVEY, INTERVIEWS, CASE STUDIES AND PAST STUDIES TO PROVIDE A WELL CONSIDERED RECOMMENDATION OF WHERE OUR SHORT-TERM FOCUS SHOULD BE, AS AN INDUSTRY ALIGNED.



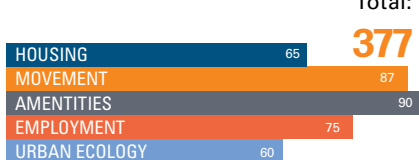
NB: It is likely that Swanbourne station was not considered by survey respondents, as an existing Market Led Proposal is being considered by the state government.

## The top 5 priority locations

### Leederville

**TRAIN LINE** Joondalup  
**ESTABLISHED** 1992

#### PLACE INDICATOR SCORE



With existing high-density development already within the catchment area, Leederville is a site that has a lot of the amenity required to stimulate further higher density development. Its inner-city location provides for competitive property values, and the area has potential for even more future growth.

**Land use mix:** Existing mix of commercial uses (retail and office), and residential dwellings of medium to high density.

**Planning status:** Leederville Precinct Structure Plan prepared and endorsed by Council for determination by the WAPC. The Plan supports a significant intensification of residential, mixed use development throughout the structure plan area.

**Each location was assessed in order to benchmark current conditions in each precinct. The place indicators assessment allowed us to understand how each location performs, in relative terms.**

The scoring indicators:

**Housing:** Current dwelling and residents; density; diversity of dwelling types; affordability to lower income households.

**Movement:** Access to public transport; cycling infrastructure; 15min walkable catchment; walkable rating - walk score.

**Amenities:** Diversity of amenities; access to open space; amenities per residents.

**Employment:** Current jobs; employment diversity; socio-economic advantage or disadvantage.

**Urban Ecology:** urban tree canopy; places of activity; state and local heritage; sustainability indicators (water, power, waste).

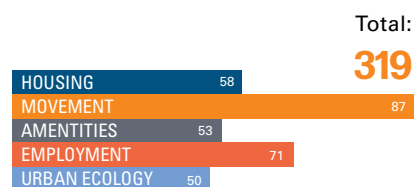


## PRIORITY LOCATIONS – CONT.

## Bayswater

**TRAIN LINE** Midland, Airport  
**ESTABLISHED** 1896

## PLACE INDICATOR SCORE



At the intersection of two train lines and set to become the biggest transit station outside of Perth CBD indicating the potential for TOD. Scores related to Movement and Employment are high whilst current Amenities is modest.

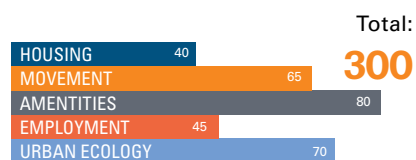
**Land use mix:** Retail and commercial high street, surrounded by low and medium density residential, with access to large amounts of public open space.

**Planning status:** METRONET East Redevelopment Area covers the station catchment with a Frame R25-R80 and core R-AC0 with heights ranging from 6-15 storeys, with residential, retail and commercial permitted uses.

## Cottesloe

**TRAIN LINE** Fremantle  
**ESTABLISHED** 1884

## PLACE INDICATOR SCORE



With a high Amenity scoring, and pent-up demand for higher density housing, Cottesloe has great potential for future TOD. Lower levels of housing diversity have left a gap in the market which higher density development will potentially be able to meet.

**Land use mix:** High density Town Centre Commercial uses to the east, low density detached residential to the west

**Planning status:** Cottesloe Village Draft Precinct Plan is currently undergoing further work to prepare the document as a Precinct Structure Plan. The most recent Draft Plan proposes R-AC densities ranging for R-AC4 to R-AC0 throughout the precinct area.



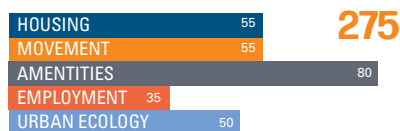
Government should spend money when market is 'cool' and stay out when it is 'hot'.

Interviewee

## Maylands

**TRAIN LINE** Midland, Airport  
**ESTABLISHED** 1896

### PLACE INDICATOR SCORE



Maylands shows promise in the future delivery of TOD, through a good balance of place and potential growth. The area is a strong performer in Amenity scoring, and from a planning framework perspective, is one of the sites most ready for TOD.

**Land use mix:** Existing commercial activity centre

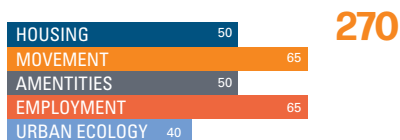
surrounding station, medium density dwellings in surrounding catchment

**Planning status:** Activity Centre Plan covers the immediate vicinity of the Station precinct. Commercial uses and residential development up to R60 is able to be developed under the Activity Centre Plan.

## Burswood

**TRAIN LINE** Armadale  
**ESTABLISHED** 1893

### PLACE INDICATOR SCORE



Burswood is a site that has great potential for future TOD. While current scoring relating to Amenity and Urban Ecology is lower, the potential for future growth is high, with much of the locality being close to ready for development.

**Land use mix:** Mixture of higher density apartment housing, commercial uses and remnant industrial uses

**Planning status:** Local Planning Policy 40 – Burswood Station East amended and adopted as of 21 February 2023, which permits grouped and single house dwelling development to a R80 density, and multiple/mixed use development to R-AC3 densities.

## An industry wide call-to-action



### Our recommendations to government

- Acknowledge that all METRONET stations will not be viable to achieve their ultimate potential in the short-term, excluding Bayswater.
- Government investment should be targeted at high-value, high-opportunity TODs which are destinations to create an enabling environment that will encourage private sector investment and increased use of public transport.
- Collaboration is key. There must be a whole-of-government approach and engagement with private sector to integrating land-use transport, servicing and enabling investment to create the foundation for TOD investment.
- Consider a multi-faceted approach to incentives to assist the private sector overcome current barriers to TODs.
- Consider governance frameworks such as improvement plans and PPPs.
- The state government should work with local government to fund improved amenity initiatives, and invest in pedestrian facilities and connections, in high priority TOD locations.
- Planning frameworks should set clear goals, objectives and parameters without fixating on one 'acceptable outcome' at the expense of ignoring or not permitting alternative or innovative solutions.
- The DPLH need to lead and should set the vision for rail corridors and station precincts across the network, and assist in facilitating and trouble shooting across agencies.
- Don't lose sight of long-term outcomes for future TODs on METRONET.

### The most important things governments can do

- |                             |   |   |
|-----------------------------|---|---|
| • Have a clear vision       | • Understand the economics                    | • Advocate benefits                               |
| • Create amenity            | • Provide certainty                           | • Fast approvals                                  |
| • Offer built form choice   | • Collaborate                                 | • Focus on destinations                           |
| • Financial incentives      | • Align agency KPIs                           | • Reduce costs                                    |
| • Flexible acquisitions     | • Identify lead agency                        | • De-risk development and ensure service capacity |
| • Identify a few priorities | • Support the Infrastructure Development Fund |   |

IDENTIFY  
PRIORITIES

BUILT FORM CHOICE

DESTINATION  
FOCUS

ALIGN AGENCY KPIS

DE-RISK

COLLABORATE

CREATE  
AMENITY

1



### Our message to property sector

- TOD precincts have the potential to be high-value areas in the short to medium term, with strengthening market appeal.
- Work with governments to clearly define the tools, tenures and incentives needed to unlock the potential of TOD precincts and innovations to provide interim and short-term amenity and development.
- Look at other models from around the world for place activation, such as Business Improvement Districts, and consider their application in key destinations.
- Consider various land tenure and asset models which can facilitate short, medium and long-term development opportunities.
- Include placemaking as an essential component to TOD. It has implications on land tenure and leasing arrangements; how common areas, tenancies, streets and plazas are designed; how tenants, residents and visitors engage and respond to the place.
- Consider the future adaptability of parking structures, so that depending on trends of car use, parking levels in buildings can be reused for other purposes.
- Think about alternative provisions and management approaches to car parking, such as de-coupling bays from units.



### Our message for communities

- Government and developers to work on educating and engaging with the community.
- Government has a responsibility to plan for growth, balancing the important values of existing communities, with the need to accommodate our future communities in the most responsible and sustainable way.
- By promoting stronger infill around transit precincts we can encourage more people to use public transport, and create vibrant centres with better amenities for everyone.
- Good TODs offer great community hubs, with affordable, sustainable and attractive living options.
- TODs decrease existing car congestion by providing better infrastructure for place and movement.



# Our Contributors

WE ARE THANKFUL FOR THE PARTICIPATION AND ASSISTANCE OF THOSE WHO CONTRIBUTED AND SUPPORTED OUR RESEARCH. THEIR COOPERATION HAS GREATLY ASSISTED IN PROVIDING VALUABLE INSIGHT INTO THE COMPLEX CHALLENGES OF MAKING TOD PRECINCTS SUCCESSFUL.

Department of Planning, Lands and Heritage

Western Australian Planning Commission

Main Roads Western Australia

METRONET

Public Transport Authority of Western Australia

Infrastructure WA

Western Australian Local Government Association

DevelopmentWA

City of Vincent

Property Council WA - Cities and Emerging Precincts Committee

Australian Development Capital

Blackburne

Brookfield Properties

Cedar Woods Properties Ltd

EG Funds Management

Finbar Group

Frasers Property

Mirvac

Stockland

Westbridge Funds Management





“

TOD isn't about putting apartments near a station, the place needs to be a destination.

Interviewee





# Transit Precincts: Perth, Get Onboard

**TRANSIT ORIENTED  
DEVELOPMENT**  
RESEARCH REPORT

