

**ACNU CONGRESS, ADELAIDE 2010**

# **Implementing New Urbanism in Australia**

## **Two decades on a steep learning curve**

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**28<sup>th</sup> April 2010**



# Structure of Presentation

- *The Context and Challenge for Australian New Urbanism*
- *Brief Congress Program Overview*
- *From Plans to Places - overview of progress using a range of Australian New Urbanist project examples that are built or under construction*
- *Examples focus on **changes to urban extensions and street forms** since 1990*
- *Conclusions about our progress with streets - the fundamental building block of New Urbanism and sustainable growth*



## Context and Challenges For Australian New Urbanism

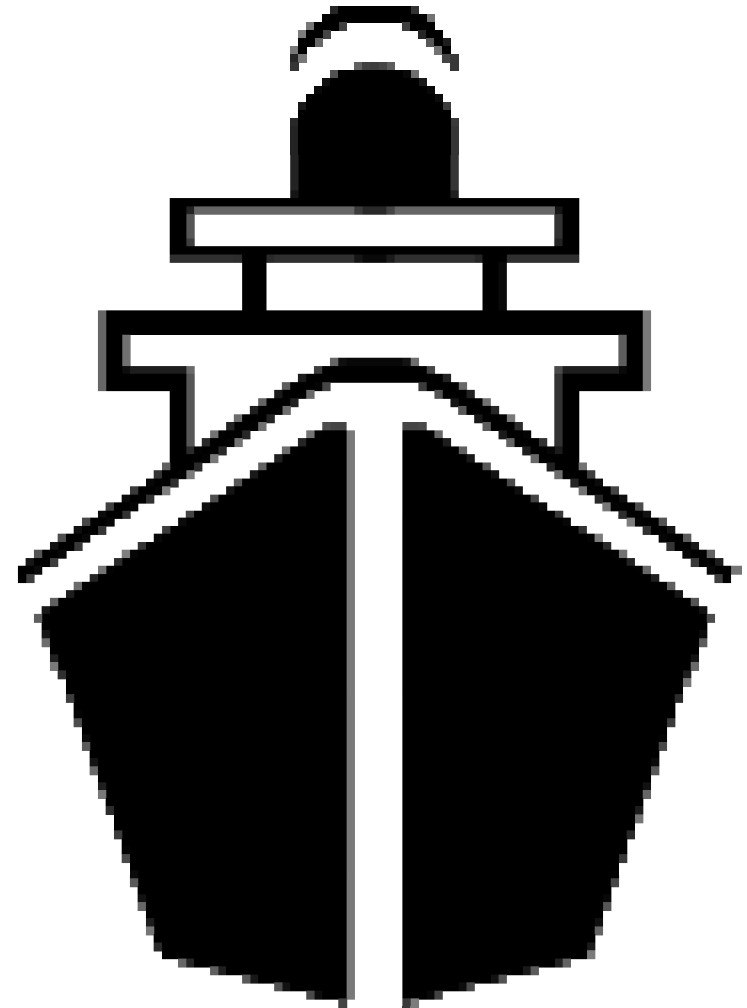
- *Australian New Urbanism has always focussed on achieving systemic transformations of all our growth... not just 'diamonds in a dustbin of sprawl'.... So many of our built places are 'hybrids'*
- *Since the early 1990's, NU has had a significant influence on planning policy at State level across the country. Most State and local governments now have strategic plans, policies and/or codes that call for Smart Growth: more intensification, TODs, enhanced public realm, mixed use, higher fringe densities etc*
- *Now, NU projects are often accused of under-delivering... not enough infill focus; not enough mixed use, limited increase in fringe urban densities...*
- *Policy is now ahead of us, yet NU remains one of the few tools for delivering the outcomes of Smart Growth policy*



## **‘Turning around the Oil Tanker of Sprawl’** **a long hard process! Analogy by Paul Murrain, 1990**

**NU began as an alternative to sprawl. Now our expectations are that it is the basis of *sustainable urban growth*... the *built form response to climate change*... the answer to our *low levels of physical activity*... and a balanced response to *environmental constraints*..... and more.....**

**Yet first, we needed to slow the boat! How much change can we expect in 20 years?**



# Evolution Of New Urbanism in Australia

- *New Urbanism began in 1991-92 in California, with first CNU Congress held in 1993. Concurrent emergence in Australia... based on similar principles.. so nearly 20 years now!*
- *Why CNU in USA? Need for a coalition of design practitioners to increase effectiveness against sprawl; to share professional knowledge, experiences and provide mutual support; and to define shared values and principles.*
- *Australians have been active contributors to CNU since the beginning...*
- *A small but relatively influential group of Australian practitioners have promoted and practiced New Urbanism since the early 1990's, both within Government and in the private sector.*
- *ACNU was established in 2000 and we held our first Congress in 2001. ACNU Projects Book published in 2005/6. Perth Projects Tour 2006. Adelaide 2010 is our fourth congress.*



# ACNU 2010 'From Plans to Places'

## Program Overview

**This morning - setting the context - overview of NU progress in Australia, Europe and USA**

**This afternoon - fixing the existing city - urban intensification, infill and redevelopment; TODs and corridors**

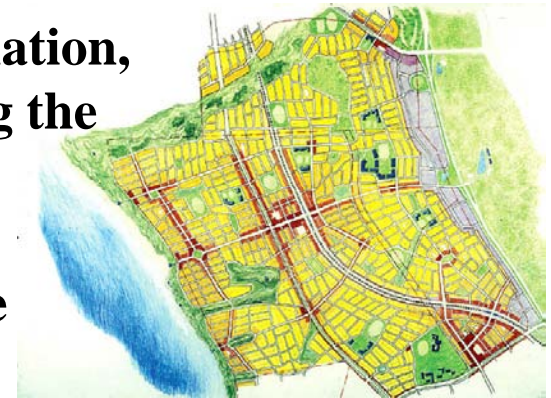
**Thursday - TODs in more detail; sustainable urban extensions; field trips to Adelaide projects**

**Friday - town centres; sustainability frameworks and metrics.**



# What is New Urbanism?

... a built environment which is diverse in use and population, scaled for the pedestrian, and capable of accommodating the automobile and supporting mass transit...



... a well-defined public realm which is responsive to site features and ecology, and supported by an architecture reflecting the climate and culture of the region...

... fine-grained mixed use town and neighbourhood centres with a variety of higher density housing in proximity....



... a highly permeable and logically-connected street network, with traffic management to provide safety and comfort for pedestrians, cyclists and transit-users....



...when applied at the regional, as well as local scale, provides a basis for comprehensive sustainable growth management





## **Australian New Urbanism - An Overview of Progress**

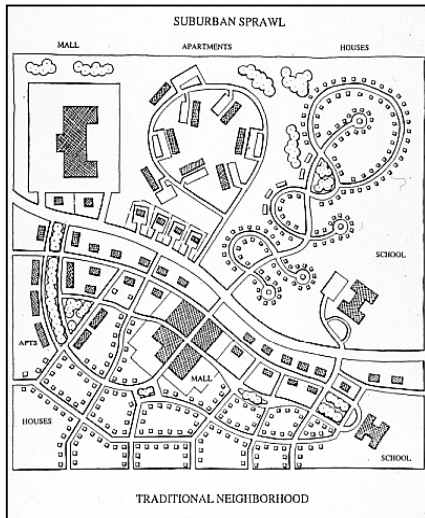
# **Urban Extensions Street Networks and the 1990's Residential Design Workshops**





# Contrasting Urban Forms

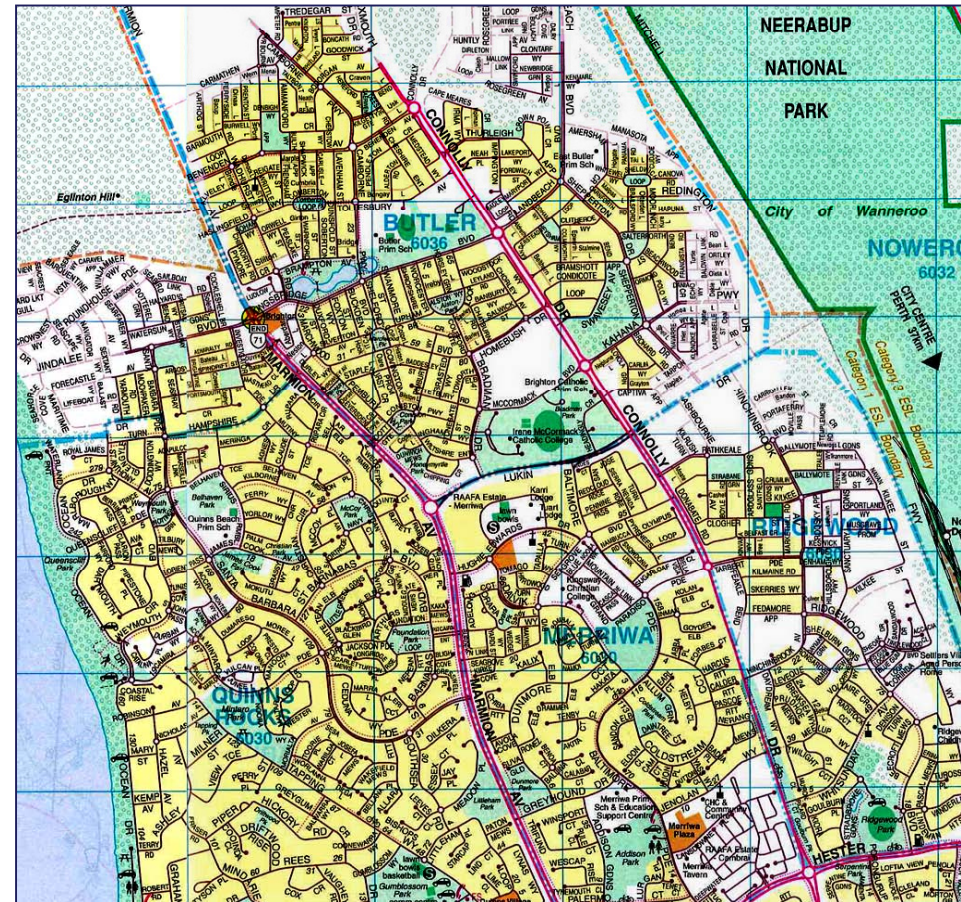
Urban structure: suburban sprawl v traditional urbanism - one very poor for sustainability, community, walkability, physical activity and health....the other much better... the essential building blocks of New Urbanism



Conventional suburban development /sprawl v traditional urban form



Real life case - Mandurah in WA!



Structure and streets as built.... Brighton in 2008 contrasts with early 1990's Merriwa, in Perth's Northern Corridor

**What progress have we made in transforming urban extensions?**

# A Brief History of Transforming the Fringe

In 1988-89 the Adelaide design community held a series of Residential Design Workshops applying Oxford JCUD “*Responsive Environments*’ principles to urban fringe sites (Gawler, Wirrina, Tanunda RDW)

Melbourne RDW series began in 1989. (Plenty Valley, Berwick, Werribee RDW). VicCode 1 released from 1990. Ongoing multi-disciplinary training RDWs with NU principles through to mid 1990’s

Perth RDW series began in 1990 - Wanneroo; then pre-*Liveable Neighbourhoods* series (Jindalee DW etc) with Edition 1 of LN released in 1997

Sydney, Brisbane – slower and later to change

Lively national debate in Urban Design Forum around 1988 - 1993, especially grid v cul-de-sac street networks



## CURBING THE CUL DE SAC

RESIDENTIAL DESIGN  
WORKSHOP CHALLENGES  
CONTEMPORARY  
SUBDIVISION LAYOUTS

The Federal push for more affordable housing and the Victorian commitment to urban behind a recent workshop Plenty Valley. Model workshops at Gawler pants worked in live produce a layout for Melbourne's fringe.

at great cost to the social fabric of the community.

Paul outlined the design qualities of Permeability, Variety and Legibility which can achieve a democratic physical form, affording choice in the public realm whilst maintaining a satisfactory level of privacy

1989

## THROWING THE BABY OUT WITH THE WATER

By Jan Martin

(on a balanced approach to permeable residential design.)

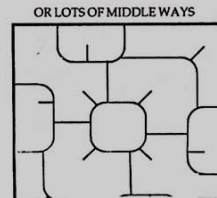
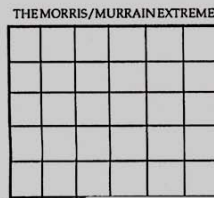
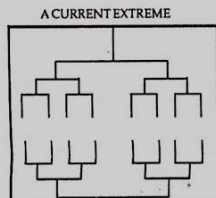
Oh Wendy Morris you've done it again! Your Melbourne-is-built-of-'grey-graph-paper' (UDF 1) kept the letters going for months. This time though, in *Curbing the cul de sac* (UDF 7) you have gone too far.

Oxford Polytechnic's Paul Murrain led a residential design workshop in Melbourne this July. Reporting it, Wendy tells us how the "cul de sac road hierarchy was challenged". It is (paraphrasing) too isolationist and impermeable. We argued to return to the "choice-laden grid".

I hasten to agree that some recent subdivisional ideas are excessively introverted. But lest the reaction become a backlash, the cure worse than the disease, let me put a moderating view.

### First, some common ground:

1. Permeability is a good thing. The question is how much of it and when.
2. It is possible to create layouts that bury people in endless ends. The "terminal tree" (illustration) is simplistic and isolating. But there are alternatives other than the grid.



Now, gloves off. The "Morris - Murrain Model" is subversive on at least 5 counts:

1. Morris-Murrain dismiss the new theories as being achieved "under the guise of traffic management". As one who has been able to work closely with traffic planners all my professional life, and having seen many projects where residents have clearly articulated their views, I say traffic management is no guise, it is crucial. People and cars are a tricky mix. Residents know this. They ask us for layouts which, by their very nature, inhibit vehicle speeds and volumes. Grids tend not to.
2. People fear streets. They tell us they value streets where stranger-drivers are instantly identifiable. Or in the jargon, they want defensible spaces. A degree of vehicle impermeability may be worthwhile to achieve this goal.
3. Morris-Murrain seems to equate permeability with vehicle permeability. Of course we do not want to return to Radburn-style total separation of car and pedestrian. But surely sometimes the pedestrian can go straight (eg. linked court heads) while the driver goes round a bit?
4. Current practice, says Murrain, would mean Melbourne would become a series of

"defendable encampments". Depending on the scale we are talking about is that so bad? Urban fabric perhaps needs some differentiation and sense of local ownership. Conversely might the choice laden grid be just a bit anonymously non-territorial?

5. Last and worst, the claims made in the article on behalf of that "section of our community least able to express their needs" are only assertions. None of us actually know how (or even whether) different layouts affect social behaviour and human happiness. We ought to, and a major survey might find out, but right now we don't.

My own guess, having pondered about traffic safety - and about permeability before I learned to call it that - is that the answer lies in the middle; a connective but somewhat indirect residential street system which is also, but not exclusively, a more direct pedestrian/cycle network.

Incidentally, I suspect that Paul Murrain himself, with whom I have discussed these issues and who - like me - had to grapple with some of the excesses of modern hierarchical street design at Milton Keynes, would agree with much of what I have said here.

## A PERMEABLE WORLD:

THE RIGHT OF REPLY

An open letter to Jan Martin

Dear Jan

Well done for generating a hot debate between friends and fellow professionals. Your article "Throwing the Baby out with the Water" (UDF9) certainly does that, and if you allow me, I'll not only "take the gloves off", but I'll put on a set of knuckle dusters as well.

If, when accusing us of subversion, you mean the overturn or the upsetting of a set of established principles, you are absolutely right and I'm disappointed that it is only subversive on five points. I could happily find a whole lot more.

First of all, the three diagrams supporting your article are rather naughty by implying in one of them something called a "Morris/Murrain extreme" (the mind boggles). The diagram is purely an organizational idea, not a literal representation of a piece of town. I never draw the diagram as simplistically as that, but even as drawn by you it provides the basis for the overwhelming majority of urban places from San Francisco to Sienna! Nearly every "beautiful" city in the world is a rational or deformed grid.

Therefore, the implication that "choice-laden or anonymous" are part of the same debate is patent nonsense. We can all go to towns and cities all over the world and find subjectively beautiful and boring, or characterful and anonymous places regardless of layout. However the one advantage of an anonymous permeable area of town as opposed to an anonymous impermeable one is that we can move through it in all sorts of directions and make our own mind up!

So, enough of anonymity; it's important of course but nothing to do with arguments about permeability.

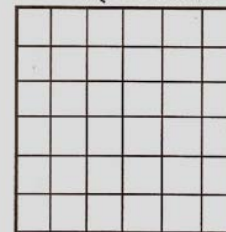
If however, the legibility of our towns and cities is one of your concerns then I am right with you. I defy anyone to find a less legible form of town than a no-frontage access distribution road lined with back fences. Combine that with culs-de-sac that no-one goes down unless they live there, visit or deliver (or are totally lost!). You only know a city and your place in it by being able to move through it. Permeability does not guarantee legibility but impermeability guarantees an absence of it!



▲ The Morris/Murrain permeable and legible concept produced at the Plenty Workshop.

The key point to this debate is centred on an understanding of the physical form of the city as a political system ie: a manifestation of the values of those who produce it and buy into it as well as the impact it has on all the people who choose to use and interact with it. There is a sad and sinister trend in all our cities (from office blocks to retail malls and all the way down to the culs-de-sac) to privatise the public realm and literally turn our backs on it. You talk of defensible spaces being desirable. I'm afraid you are dead right. I acknowledge it, worry about it and I fight like hell to convince people of the self-fulfilling prophecy in it. If we back off from the public realm it in turn becomes worse,

JAN MARTIN'S  
MORRIS/MURRAIN EXTREME



▲ Grid: choice laden or anonymous.

## Changes on Residential Design Workshop sites

Plenty Valley 1989 site – a good outcome... but not matched by many others. Yet all that have been built do show impact of the RDW.

Plenty Valley has a service road arterial frontage; created park to protect red gum assets, and is fronted by streets; good permeable street network; lots of cross-roads (roundabouts imposed); increased density and lot diversity; established a corner store (but now dead?).

Now the train is coming to South Morang, and this core piece of catchment is prime real estate... but density far too low!

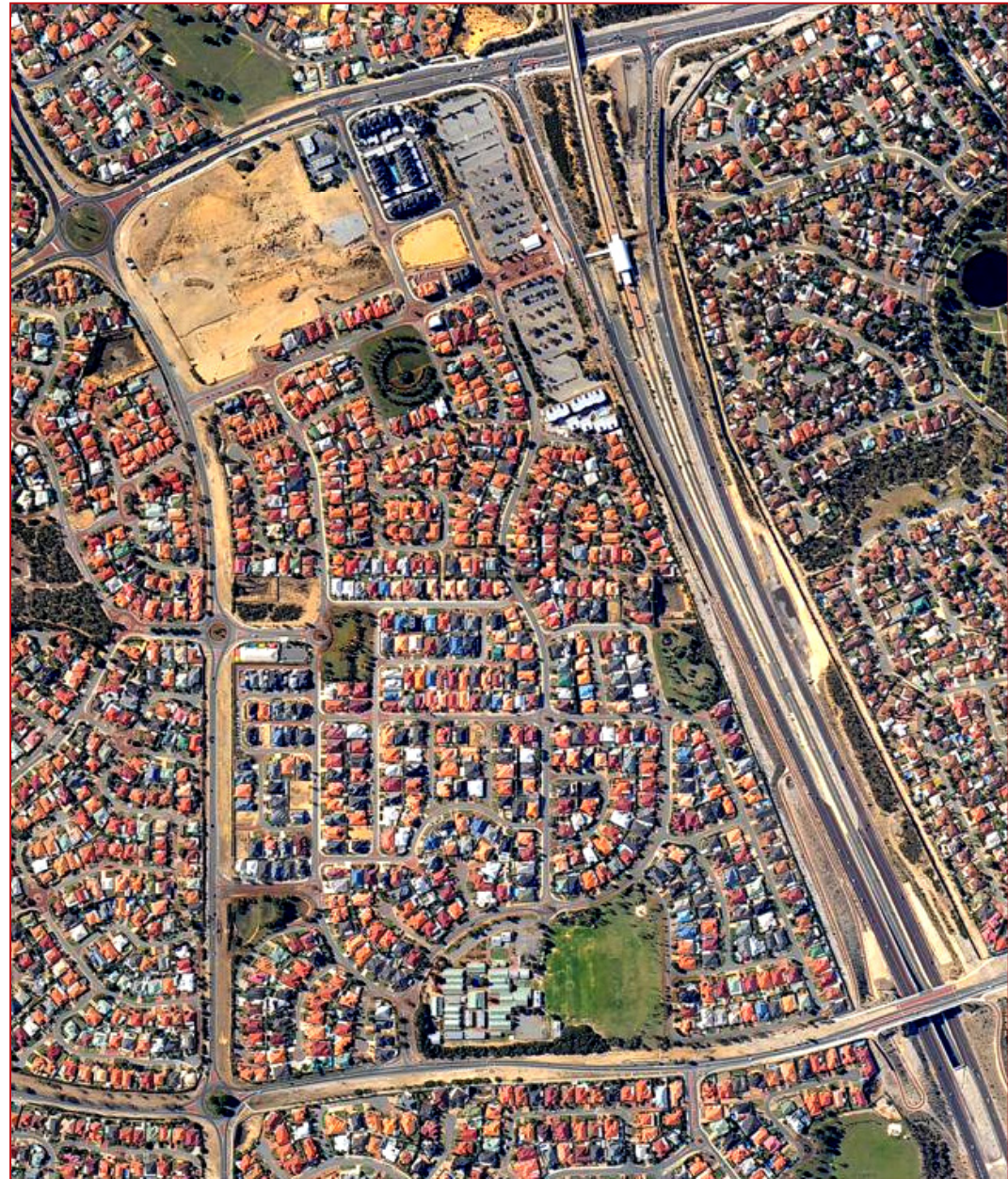
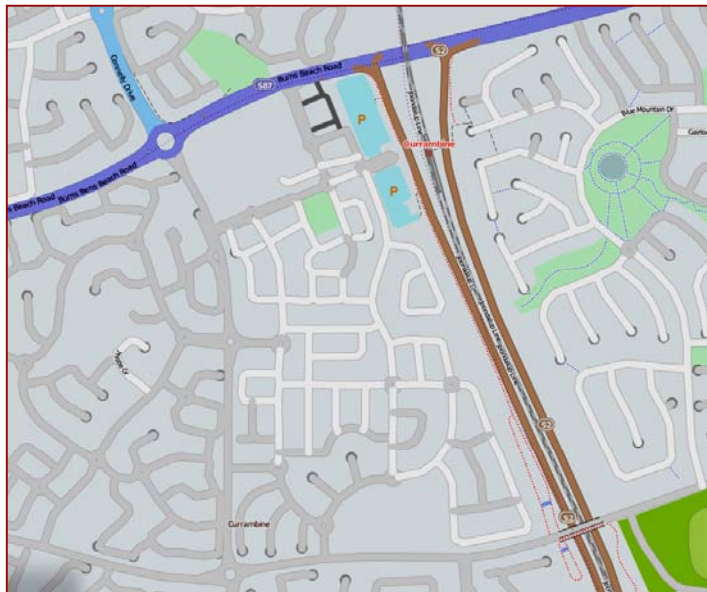


# Wanneroo - Currumbine DW site

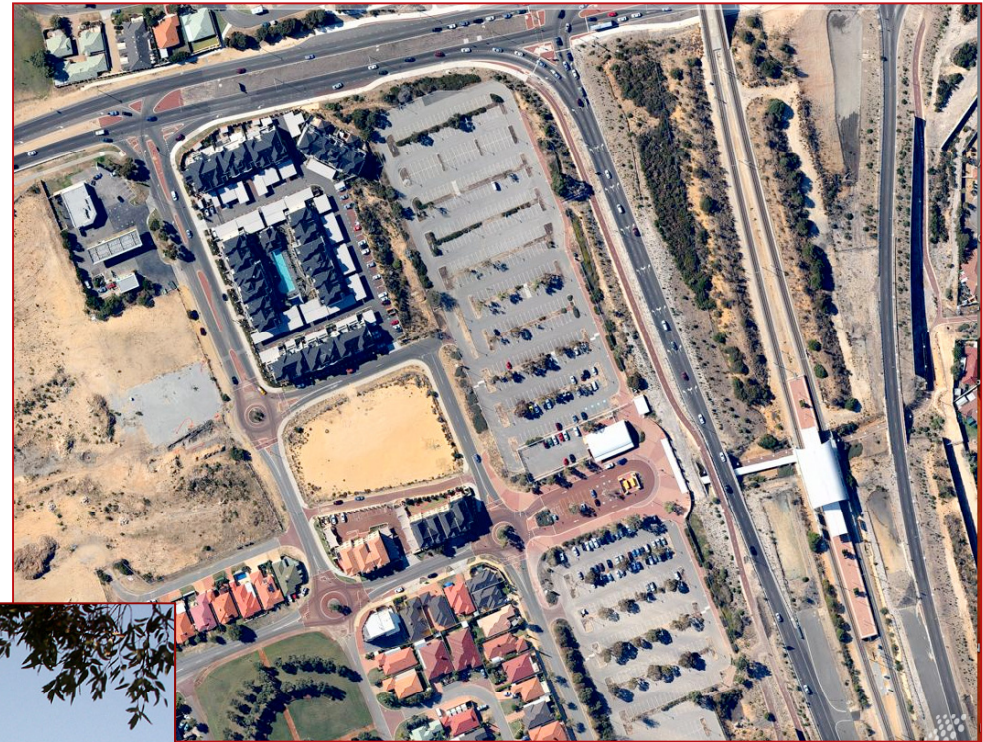


1991

2010



**Currumbine Station Precinct  
- first apartment block now  
built, street networks and  
density improved, but not an  
optimised TOD**



**Huge commuter car park a  
legacy of being the end of  
the line until recently**

**Now becomes a  
development opportunity**

# Perth and *Liveable Neighbourhoods*

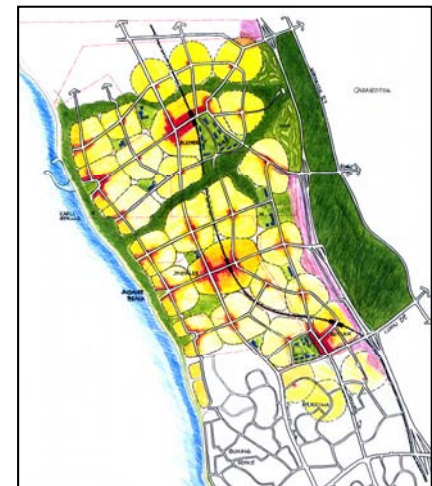
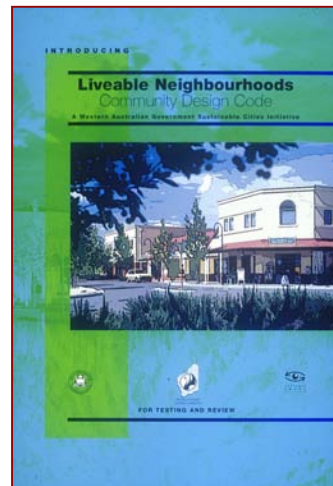
LN was preceded and informed by the Jindalee Comparative Design Workshop, 1996, and other design workshops on different sites.

Edition 1 released by Government (WAPC) as optional alternative code in 1997.

Now at Edition 4, 2008, and now adopted as State Policy/Code.

Significant change in form of new urban fringe extensions built across Perth and WA. Impressive, but still a long way further to go....

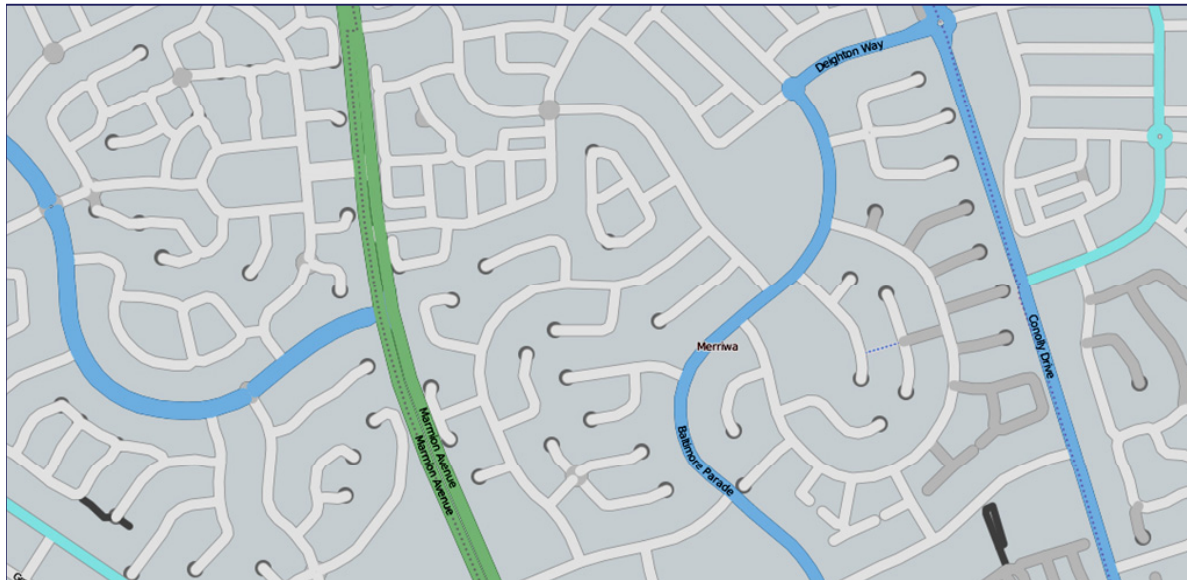
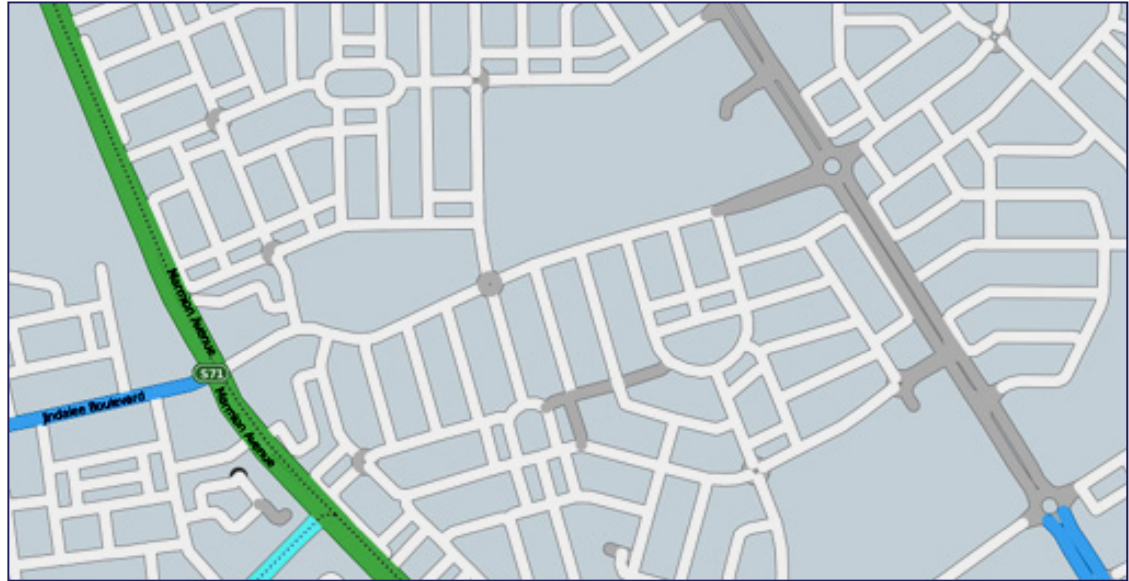
Good impact on major Perth infill sites as well.



# Built urban extensions in Perth

## PERTH EXAMPLES

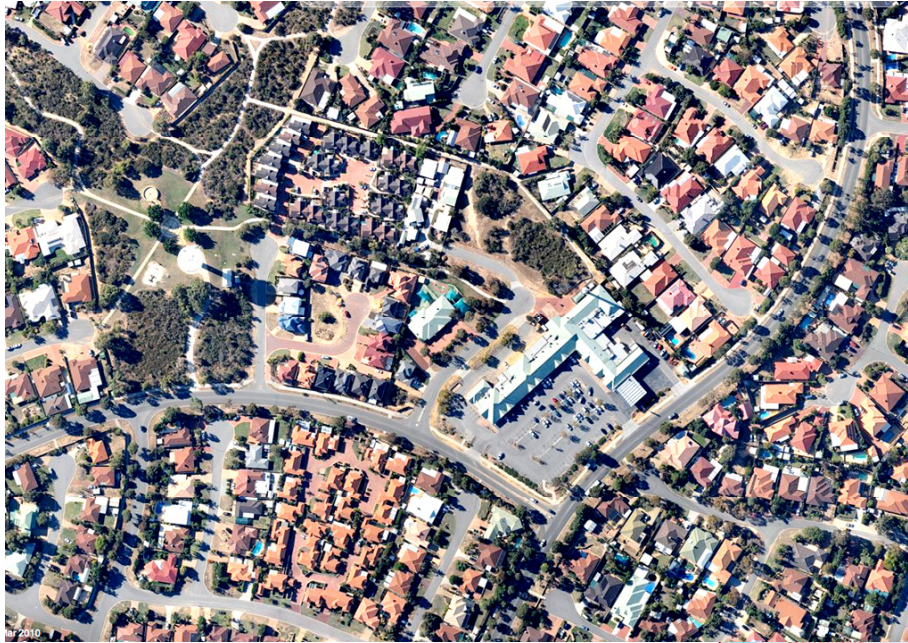
Brighton - mid 2000's



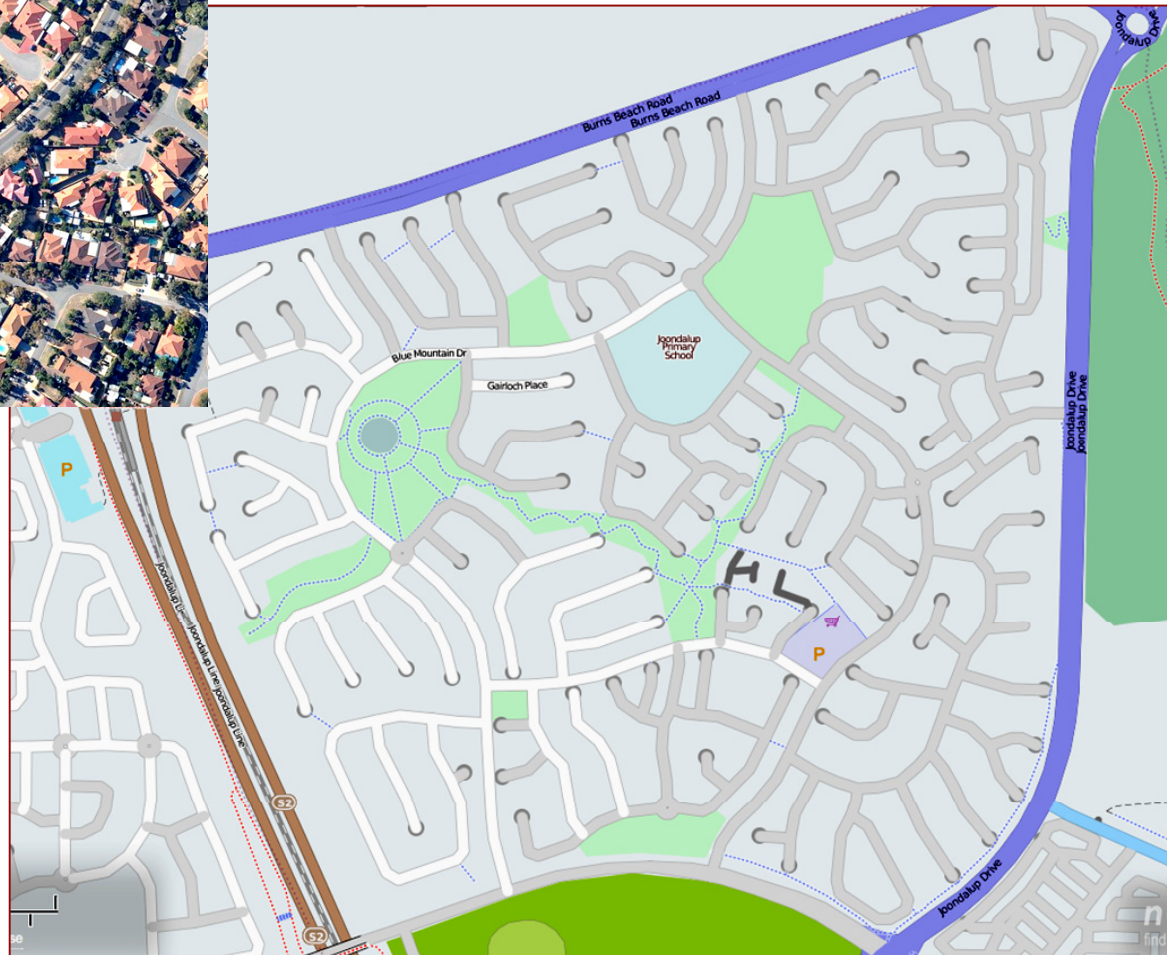
Merriwa - late  
1980's/early 90s



Typical Perth urban fringe development  
to the mid 1990's – *'best  
planned sprawl on the planet'*

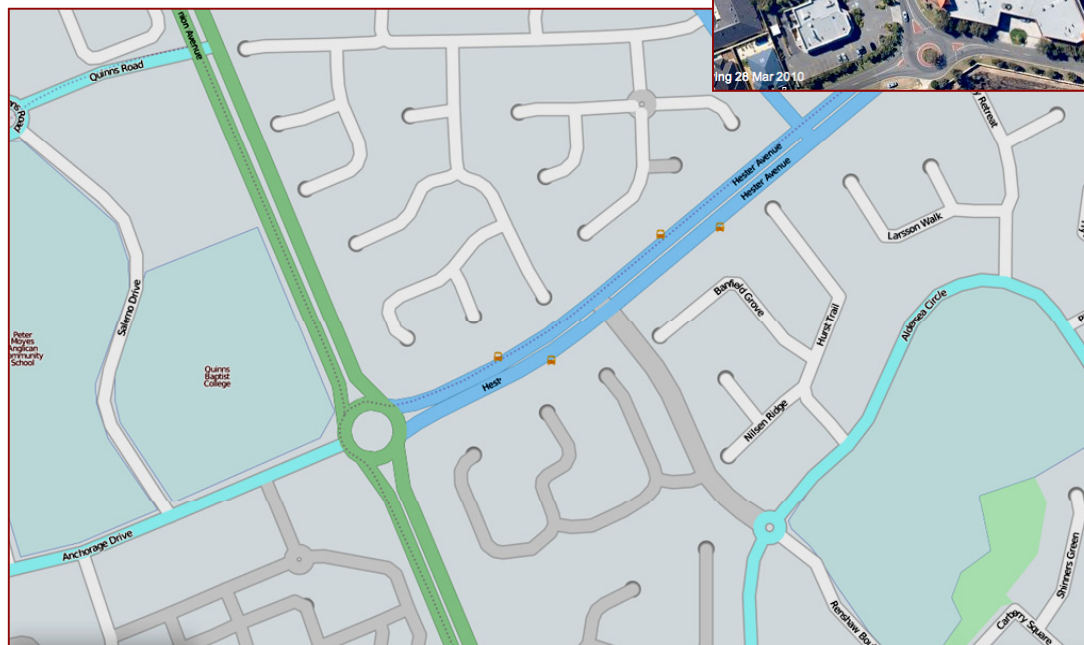
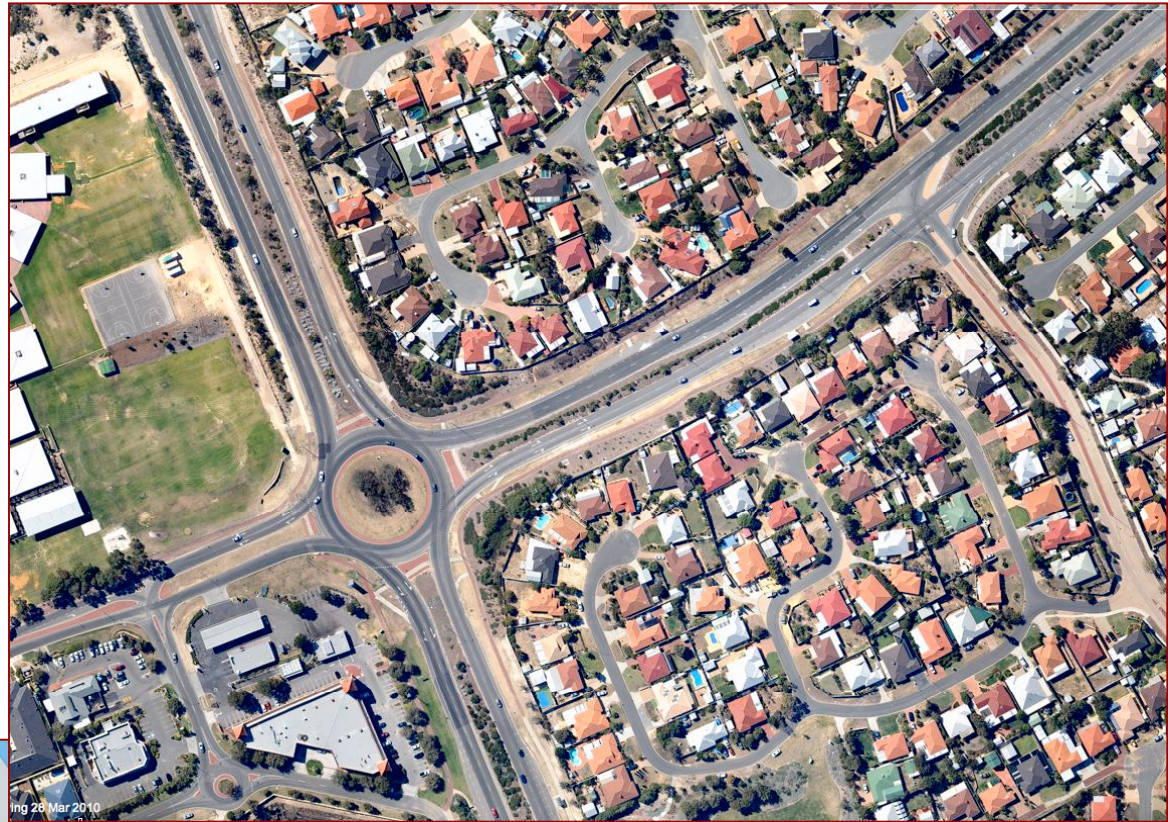


Currumbine, 1980's



## Typical major junction

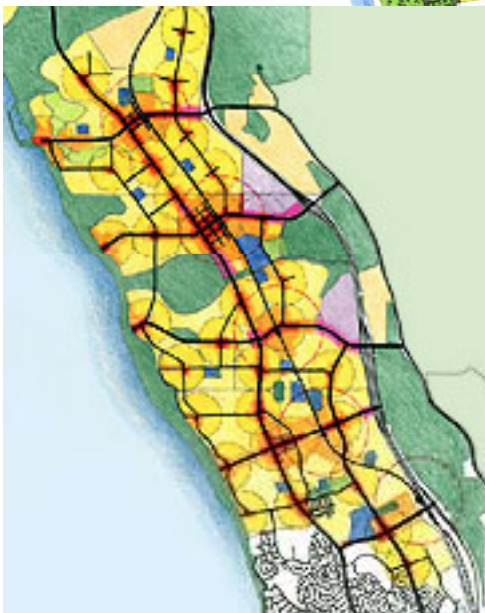
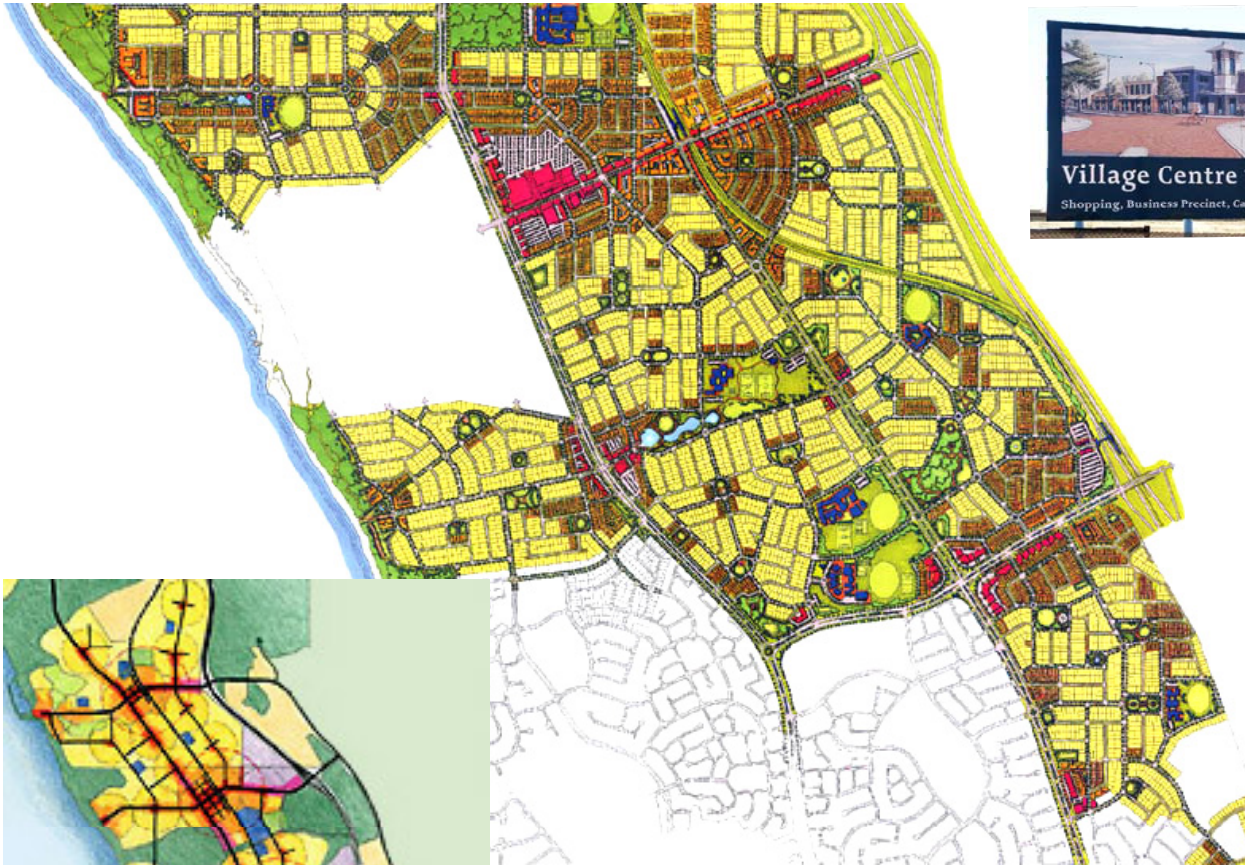
Merriwa – junction of Marmion Ave and Hester Ave from 1990's



Cul de sacs; poor walkability; back-fenced arterials without safe crossing to shops or schools; bus stops but poor bus access; car-based local centre (at least its on the Movement Economy!) with no urbanity

# Brighton

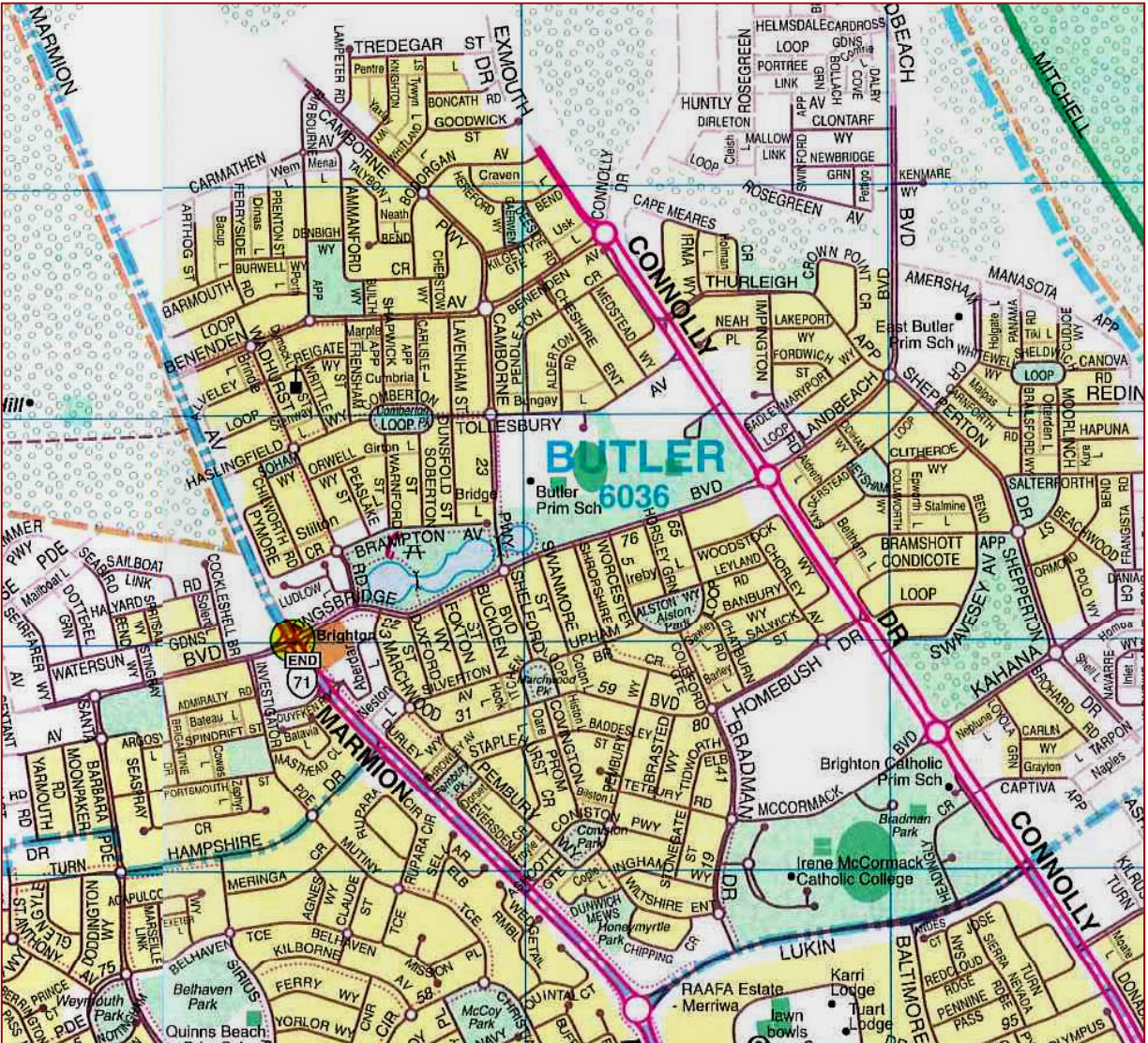
NW Growth Corridor, Perth, WA



**‘Liveable Neighbourhoods Code’  
urban extension with village centre,  
future rail route and mixed use  
Brighton Town Centre**



# Brighton – post LN



# Brighton - Village Centre



Major Intersections and Centres - Brighton – Marmion Ave and Knightsbridge Bvd - an activity node on an integrator arterial is emerging

# Brighton - village centre



Brighton's CornerStone pub



# Brighton - residential & parks



Brighton – small street blocks; legible and direct; local cross roads; rear lanes; parks bounded by streets; housing diversity



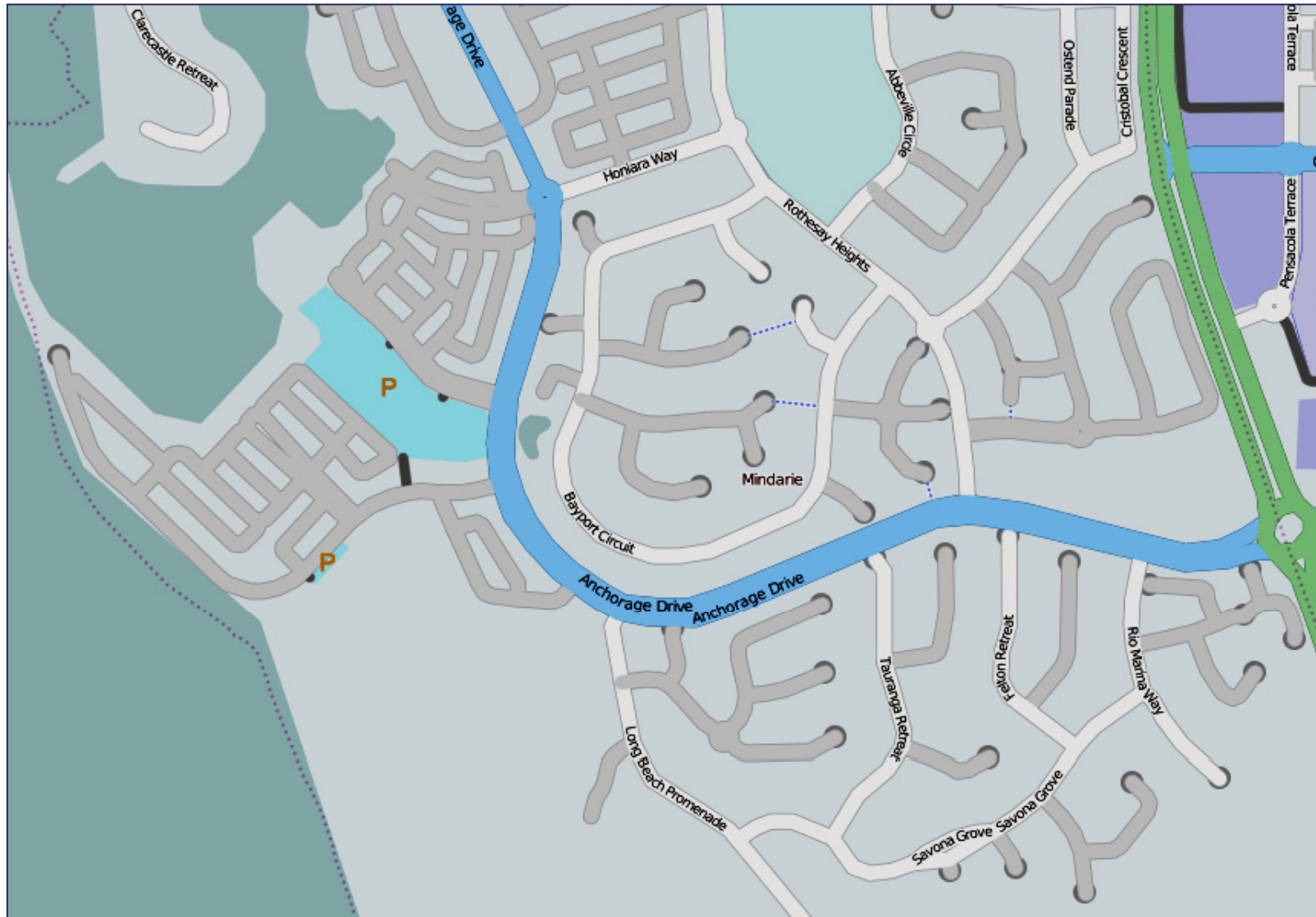
## Brighton - imminent train



Brighton – rail being extended ahead of growth, nearly 40km north of CBD; increasing housing density emerging around future station...but is it enough?



# Contrasting Urban Forms



Mindarie, Northern Perth – new section on left... very different to 1980's on right

# Contrasting Urban Forms



Mindarie - new (left) and old (right)

# Somerley

Clarkson, North-west Corridor, Perth, WA

Transit-oriented urban village at recently-opened Clarkson Station. Rail being extended well in advance of freeway. Nearby Ocean Quays Town Centre is a main street hybrid, with street front development expanding. Council and Landcorp key players.



## Somerly, February, 2010



Clarkson Station, built well in advance of freeway, and urban development rapidly building out

# Somerly - February 2010



# Wellard

SW Perth, WA

Transit-oriented urban extension at new station south of Kwinana on the new Perth SW railway, with village centre and higher density housing.



# Wellard TOD, March 2010



# Tullimbar Village

Albion Park, Illawarra, NSW



Urban extension with proposed mixed use village centre in a rehabilitated farmland valley. Private development-led, with first stages opened in 2006. Relatively dense plan with extensive use of rear lanes.





# Tarneit, Western Melbourne



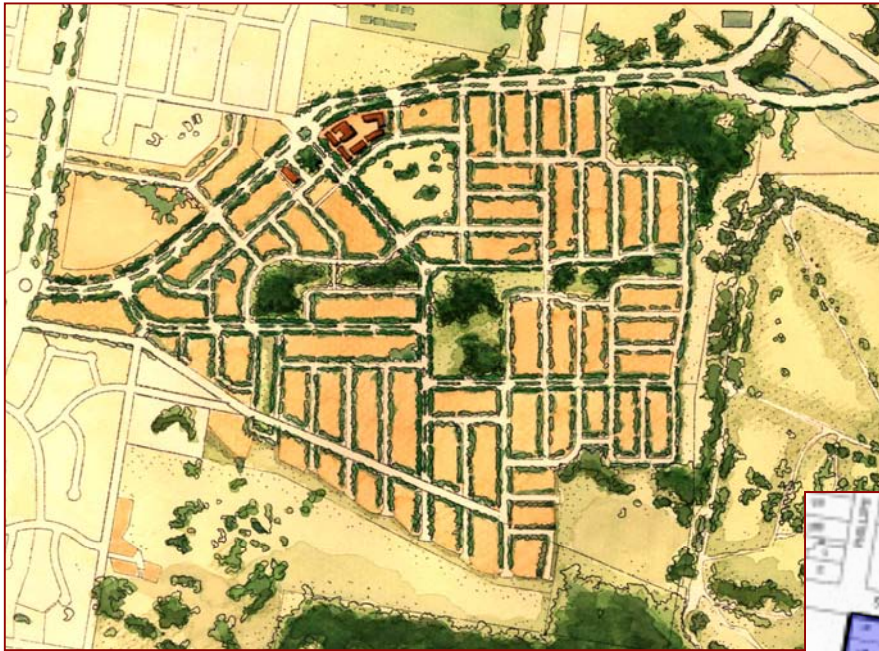
**Mill Park 1990**



**Tarneit, 2010**



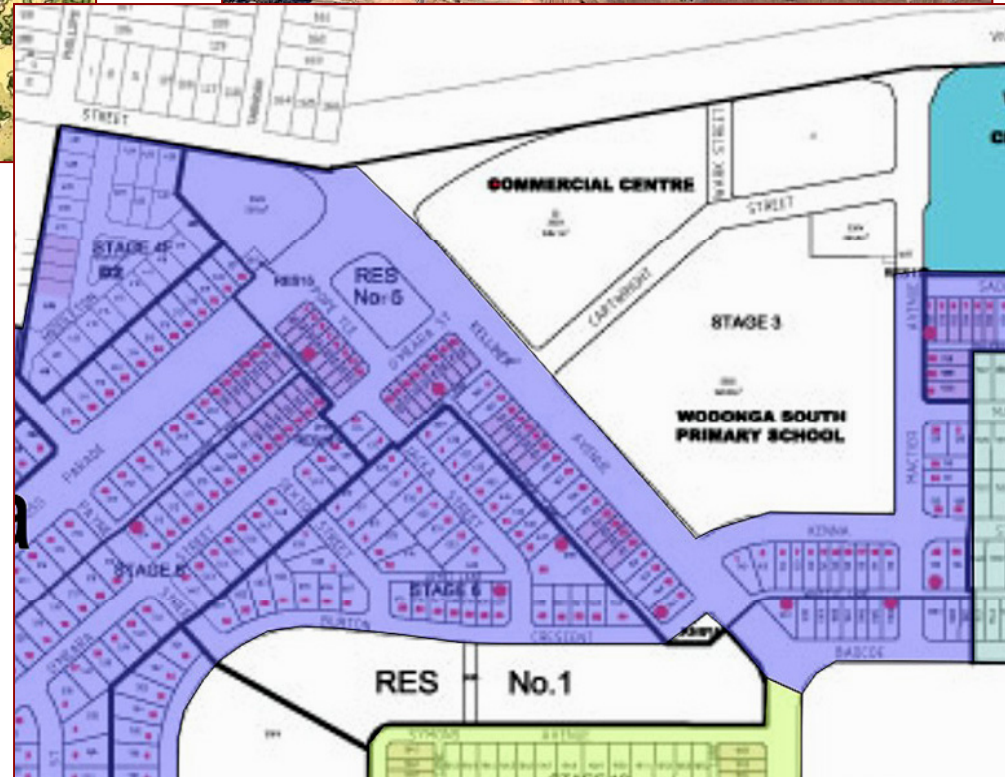
# Wodonga - White Box Rise



AAUD plan

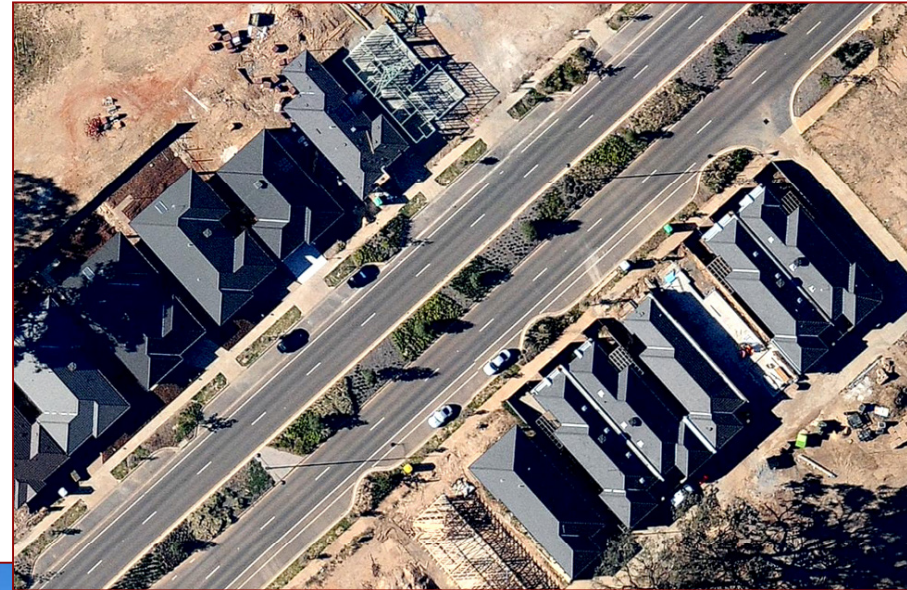
Good density -  
 $1163dw/86ha = 13.5dw/ha$

Terrace lots and smaller  
conventional lots selling  
very well



## Terraces and rear lanes in WBR

**New dwelling controls in WBR requiring garage setbacks for front-loaded dwellings, eaves, etc also changing housing product in Wodonga**





## **Australian New Urbanism - An Overview of Progress**

# **Major Urban Infill Sites**



# Beacon Cove

Port Melbourne, Victoria

A formerly-controversial and contaminated government-owned infill site that catalysed medium rise development in inner Melbourne. New public waterfront and village node, with tram stop, and great 'general' store.



Beacon Cove car courts fronting boulevard



Fully public waterfront

# Kensington Banks

Melbourne, Victoria



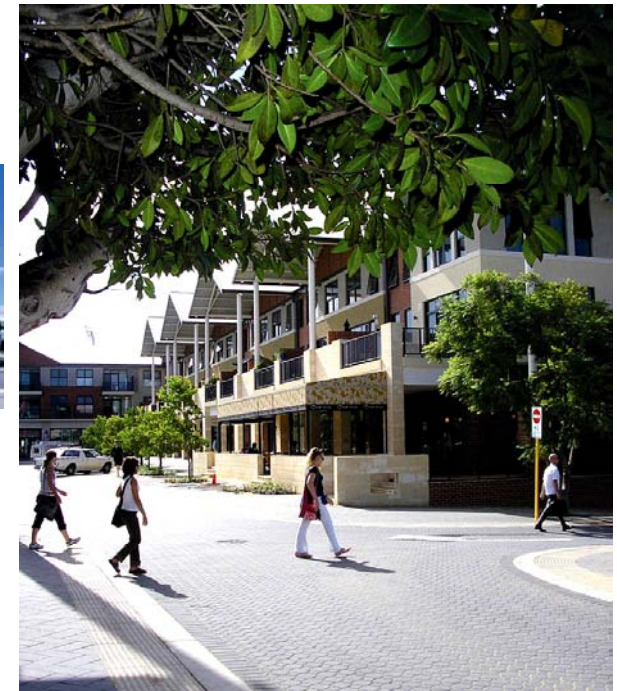
**Former saleyards site. Very dense terrace development with lanes, studios and home-based businesses, and retained heritage landscape. Government-led initiative... with flooding problems solved off-site.**



# Subi Centro

Subiaco, Perth, WA

Former industrial.  
New station, and  
Rokeby Rd retail  
anchor. Extensive new  
commercial/office  
development, lots of  
terrace housing and  
some live-works.  
Redevelopment  
Authority.



# Claisebrook Village

East Perth, WA

Former contaminated industrial site. Done by a Redevelopment Agency. Now a major new mixed use inner urban community. Great urban art & public spaces.





# Hunterford

NW Sydney, NSW



**Landcom-led dense and diverse housing infill site north of Parramatta. Excellent application of design guidelines. Rear lanes and studios.**



# Discovery Point

North Arncliffe, Sydney, NSW

A high density mixed use urban village around Wollie Creek Station, serving two rail lines. Key outcome of a 1996 charrette to revitalise an old inner industrial area.



# Breakfast Point

Concord, Sydney, NSW

A dense residential infill of mainly apartments on a former gasworks site on Sydney harbour. Village centre; live-works, medium rise apartments. Private development.



# Kelvin Grove Urban Village

Kelvin Grove, Brisbane, QLD



University integration, a dense mixed use centre and diverse housing. The Qld Dept of Housing in lead role, with QUT.





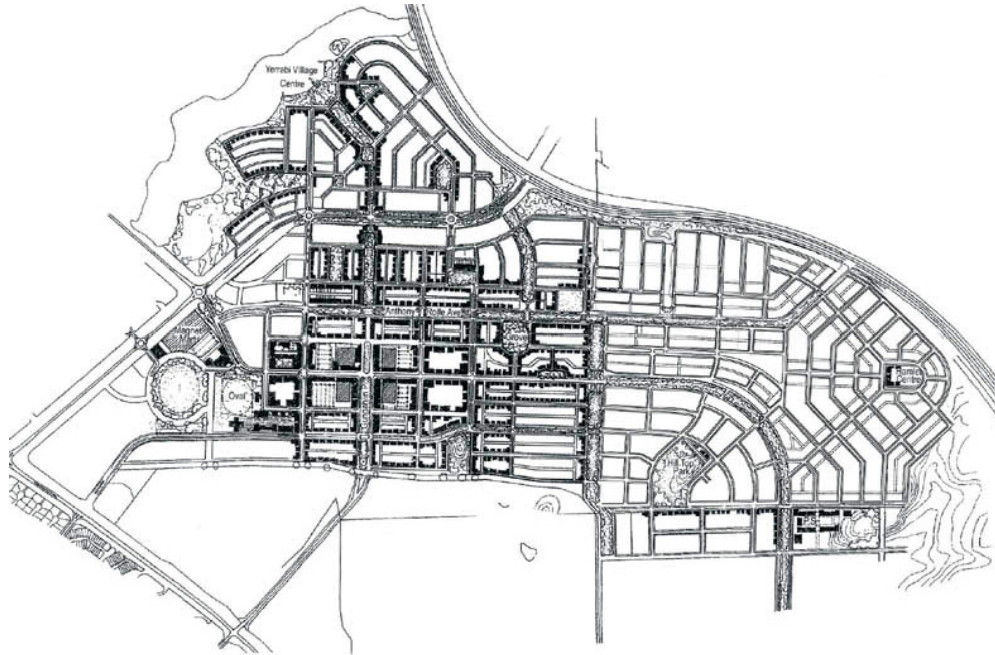
## **Australian New Urbanism - An Overview of Progress**

# **New Mixed Use Street-based Town Centres**



# Gungahlin

Canberra, ACT

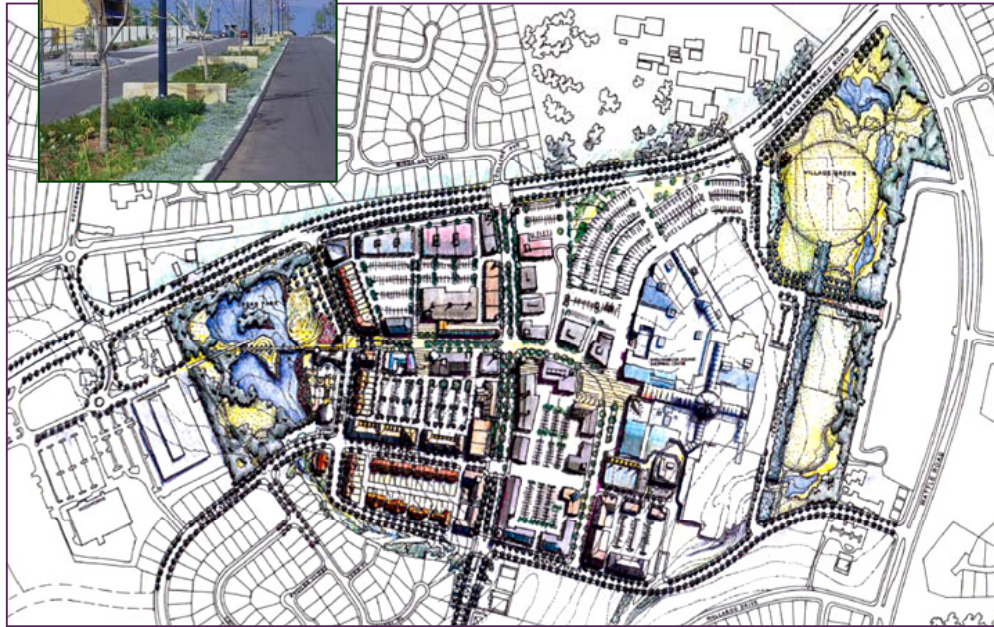


**New street-based town centre, and new relatively-dense 'inner suburbs'. Led by an ACT Development Authority.**

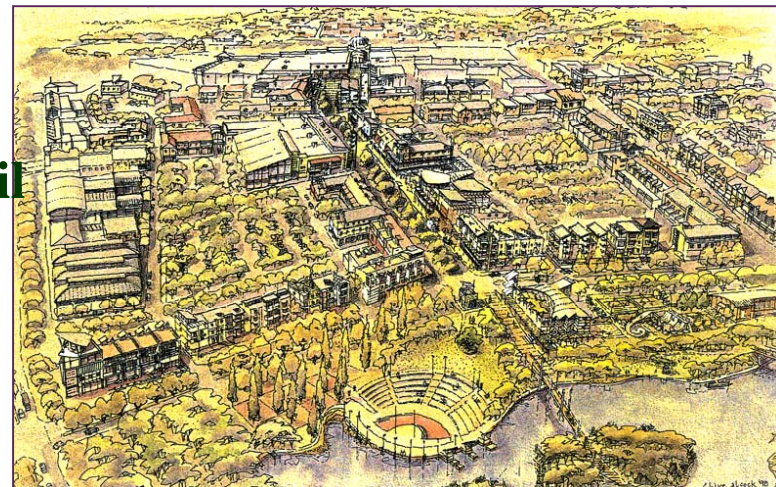


# Shellharbour City Centre

Shellharbour, NSW

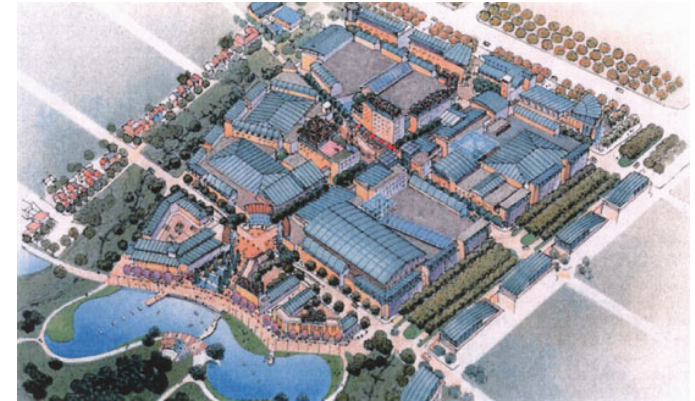


**Creating a street-based town centre for Shellharbour by linking up two distant retail stand-alone centres. Mixed uses are gradually being constructed along the new street. Cinemas and restaurants are completed. Pub underway.**



# Rouse Hill Regional Centre

NW Sydney, NSW



**Street-based mixed use regional centre under construction in 2007 to serve new urban growth in Sydney's North-west Sector. State government-owned site.**





# Joondalup City Centre

Perth, WA

Creating dense, mixed use inner suburbs around a new urban fringe centre. Extensive terrace housing, rear lanes, studio units and a range of small business spaces.



# Point Cook Town Centre

## Western Melbourne, VIC



Main street-based centre to serve around 30,000 people in the Wyndham growth corridor. 'Melbourne 2030' demonstration. Private developer (Walker Corp) appointed by VicUrban, and construction of Stage 1 is now open (August 2008).





## **Australian New Urbanism - An Overview of Progress**

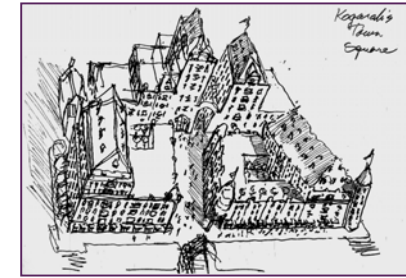
# **Urban Centre Regeneration**



# Kogarah Town Centre

Southern Sydney, NSW

Major revitalisation of middle-ring town centre to walkable urban village. Catalysed by redevelopment of a Council car park to a five-storey mixed use development focussed around a new town square. Leading design demonstration of building energy and water efficiency.



# Midland, WA

**Major revitalisation charrette  
1997**

**MRA established 2000**

**Refined visions 2002 & 2007**

**Extensive site clean-up, street  
construction, new level crossing,  
landscape restoration 2002-2009**

**Police, hospital, university  
catalysts**

**Woodbridge coal dam catalyst -  
now >\$1m housing**

**Urban frontage to Midland Gate  
SC as part of expansion**

**Retail high street revitalising**

**Recent 3-4 storey mixed use,  
apartments, live works**



## Midland - Central Mixed Use Precinct and Coal Dam precinct



# Gosnells Town Centre

## Perth, WA



**Council-led redevelopment of town centre badly affected by low amenity, car-based highway strip development. New Main Street connected at-grade across the rail line to integrate communities west of the line into the Centre, and a new station constructed.**





## **Australian New Urbanism - An Overview of Progress**

# **Government Codes, Strategies and Policies**





# Liveable Neighbourhoods Code

## State-wide Code, WA



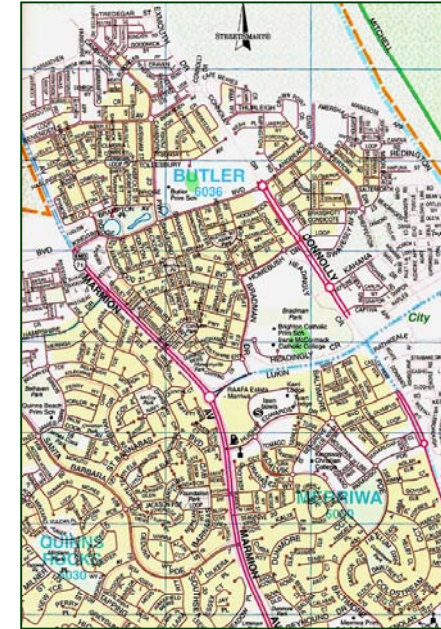
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[www.wapc.wa.gov.au](http://www.wapc.wa.gov.au)

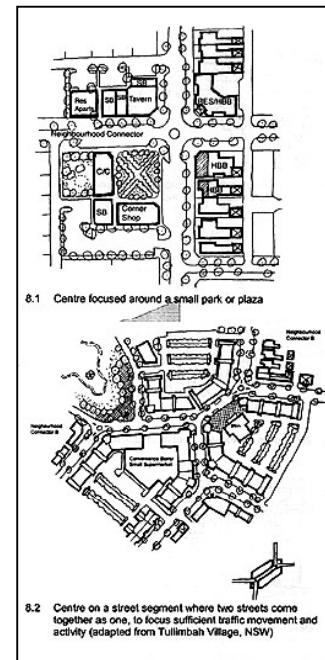
### Code Design Elements

- E1. Community Design
- E2. Movement Network
- E3. Lot Layout
- E4. Public Parkland
- E5. Urban Water Management
- E6. Utilities
- E7. Activity Centres & Employment
- E8. Schools



*CNU 2001 Charter Award winner*

Edition 4 now adopted as Policy





# Conclusion



**Street network transformations (in most Australian cities and towns) after 20 years**

**Virtual disappearance of the CUL DE SAC!**

**Highly interconnected residential street networks**

**Return of the footpath, smaller kerb radii**

**Disappearance of the 400+++m long street block**

**Frontage, rather than back fences, to most arterials**

**Traffic lights, not roundabouts at arterial intersections**

**Vastly improved legibility, and return of the local cross road**

**Rear lanes in common usage again**

**Missing street links being built in revitalisation projects**

***THE OIL TANKER HAS SLOWED AND THE TURN IS UNDERWAY***

