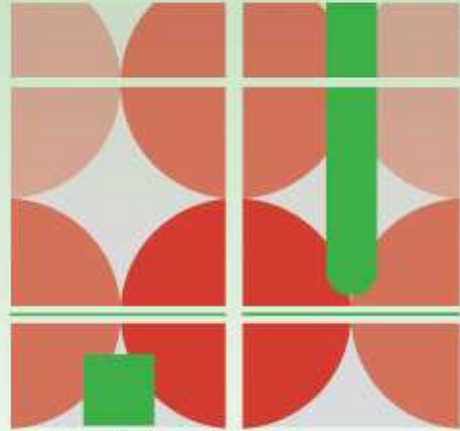


ACNU08

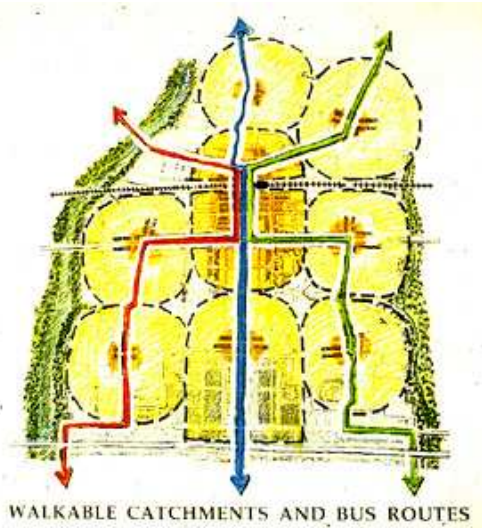


Brisbane

**2008 NATIONAL
CONGRESS OF THE
AUSTRALIAN COUNCIL
FOR NEW URBANISM**

6th – 9th February, 2008





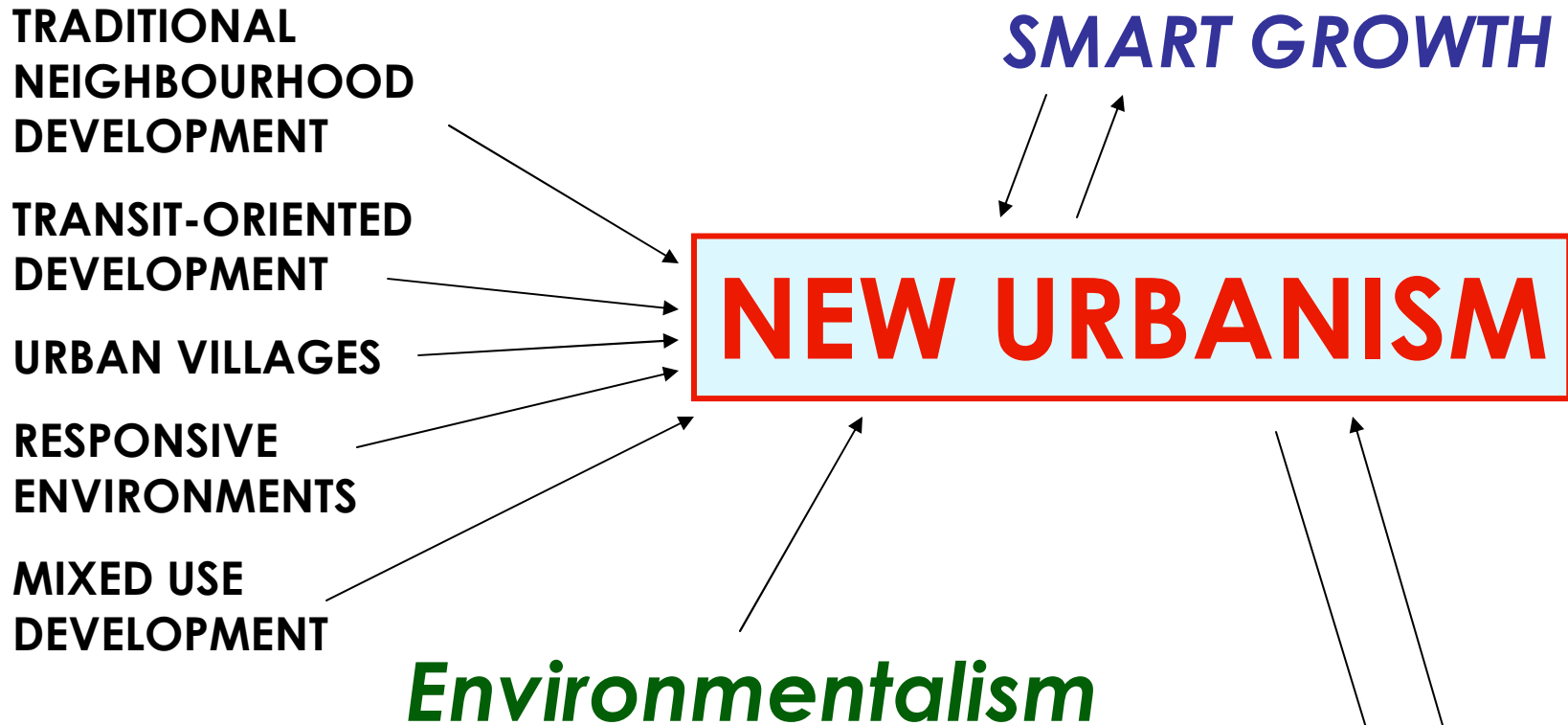
Australian New Urbanism

Principles, Practices, Examples, and Genesis

Chip Kaufman, Ecologically Sustainable Design Pty Ltd (ESD), Melbourne



Origins of New Urbanism



Term adopted in 1991-2 in the USA, and the Congress for the New Urbanism (CNU) was established as an alliance of like-minded professionals. First CNU Congress held in 1992.

Contents of Chip's Presentation

Genesis of NU, its rising momentum, and Australian Involvement

NU defined, by comparing to Sprawl, with case studies

Segregated versus Mixed Uses

Residential

Employment

Movement Efficiency, Safety and Amenity

Mixed-Use Centres vs Private Enclosed Shopping Centres

Physical Health and Social Well-being

Town and Neighbourhood Structuring

Enquiry by Design Processes

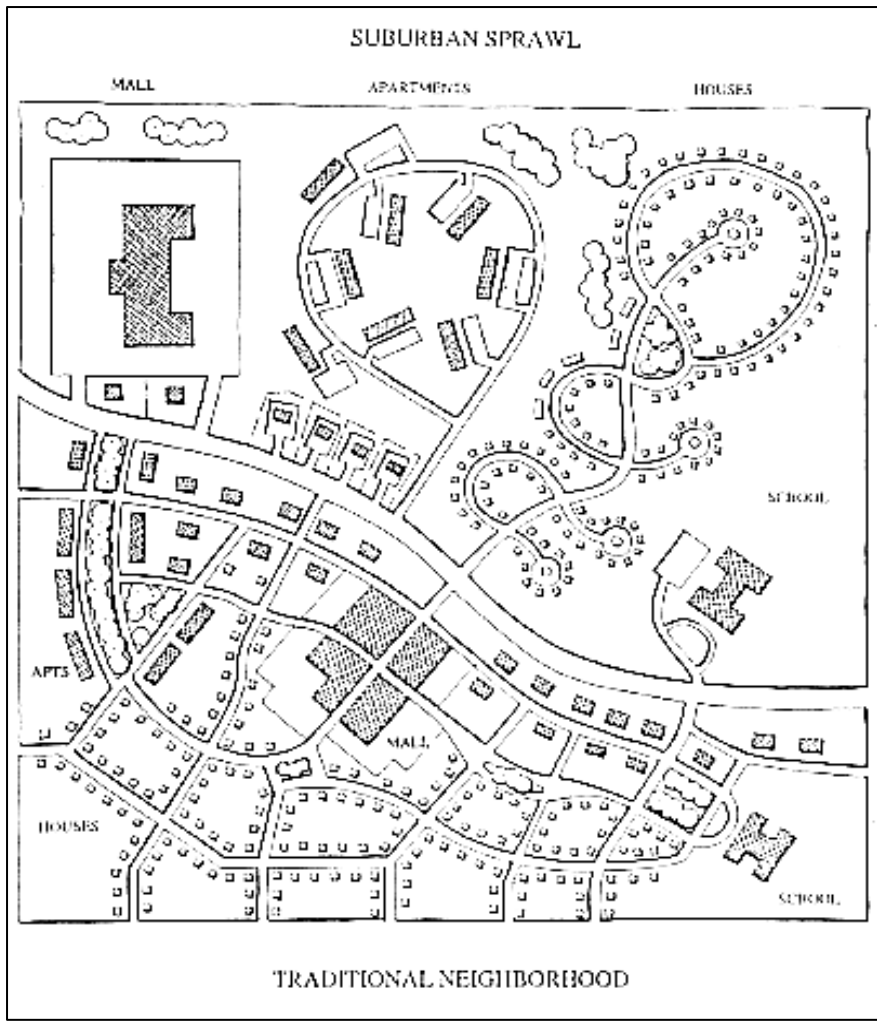
Optimising Urban Structure for Urban Centres, Movement, and Public Transport, with case studies



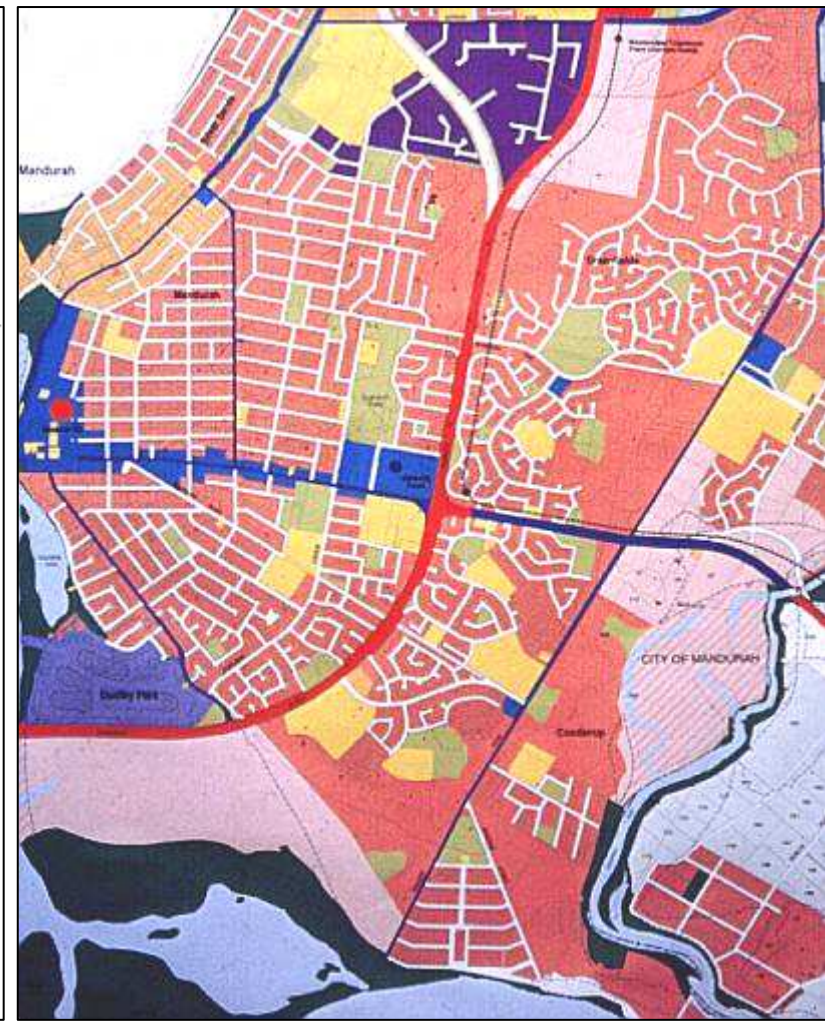
Community, Environment, Economics

Self-evident Common Sense

Sprawl versus New Urbanism



Cartoon courtesy of Lizz Plater-Zyberk



Mandurah, WA

What is New Urbanism

Initially A Reaction to Sprawl

Now a Basis for Sustainable Urban Management & Smart Growth, and

A Design Basis for Addressing Physical Health and Social Well-being, and

A Design Basis for addressing Climate Change and Peak Oil

But NU has failed thus far to fully demonstrate its worth to Australia.



An Unauthorised NU Genesis,

including Australia's Involvement

Timeline of New Urbanism, www.cnu.org

1980's: Spontaneous reaction to Sprawl, in US, England and Australia

Responsive Environments...Murrain et al at Oxford Seaside, Florida

Delivered Community

Unleashed pent-up demand

Massively profitable and newsworthy

Out of reach of Sprawl regulations

Coding for local vernacular, climate, materials

Little but dazzling mixed-use centre on highway



Wendy Morris goes to Oxford, taught by Paul Murrain

1989: Folsom Lecture by Andres, epiphany for Chip, elevation of Peter Calthorpe, Chip becomes DPZ West Coast Office

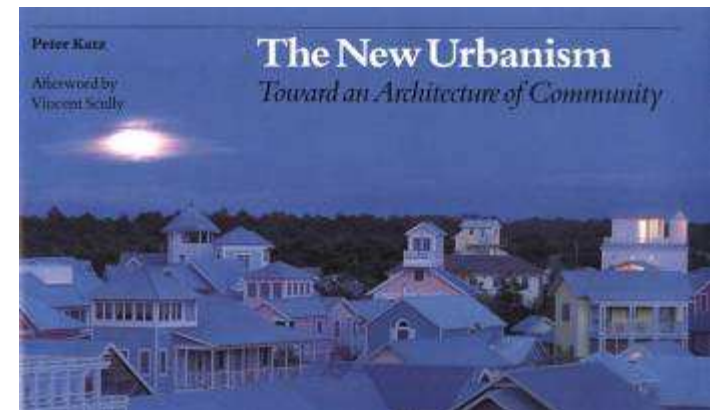
1991: Chip meets Wendy and Murrain at McKean Street in Melbourne, VicCode I launch, design workshops, NU seeds begin to sprout in Oz

1991: Southport Charrette, Sacramento: hatched by Chip for DPZ, with Calthorpe, Stef Polyzoides, and guests Morris and Murrain, plus Peter Katz...seminal meeting over dinner, to hatch 'New Urbanism' as a movement during that charrette

1992 Cranbourne Charrette (led by CK) and Bayside Charrette (led by Murrain) - first two charrettes - applying New Urbanist principles to both an urban extension and growth corridor, and then an urban infill site.

1993/4 CNU I in Alexandria USA: Morris, Murrain, Dover, Poticha, and Chip

1994.... 'The New Urbanism - towards an Architecture of Community' by Peter Katz, published in USA.



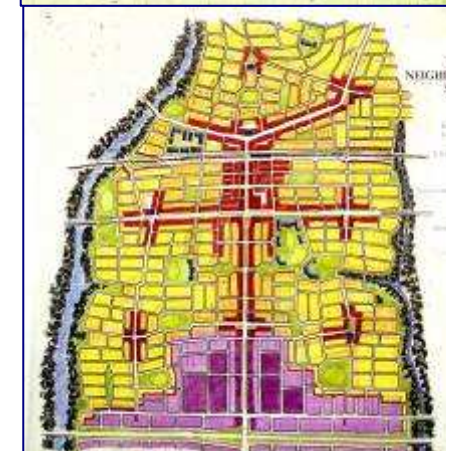
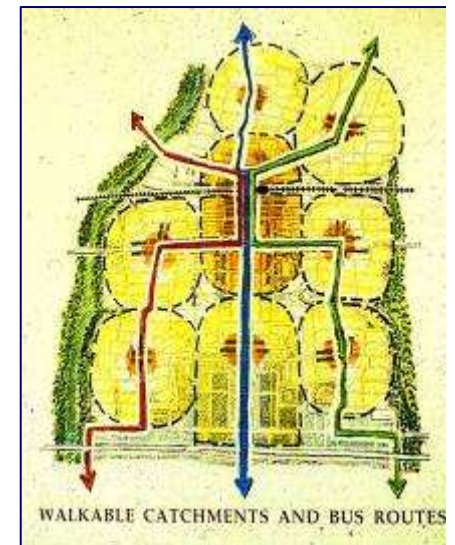
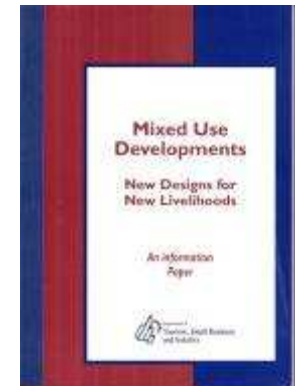
1994: Chip moves to Melbourne, founds ESD, Kennett elected, Wendy begins working with Chip, and soon leaves State Government

1995: The CNU Charter finalised and signed at CNU IV at Charleston, USA. The usual Australian and Pommie suspects attend.

1996: Queensland DTISB published ESD's *Mixed Use Development - New Designs for New Livelihoods* ('The Primer').

1997: WA Government publishes *Liveable Neighbourhoods Code*, as an optional code for urban extensions. WA already taking a strong lead in the move away from sprawl, with several projects already under construction, including Ellenbrook.
2001 CNU Charter Award for LN

2000: The book '*Charter of the New Urbanism*' published in USA by CNU, to explain the 27 Charter principles.



2001: First Australian and New Zealand New Urbanism Congress in Melbourne, over four days with 400 attendees.

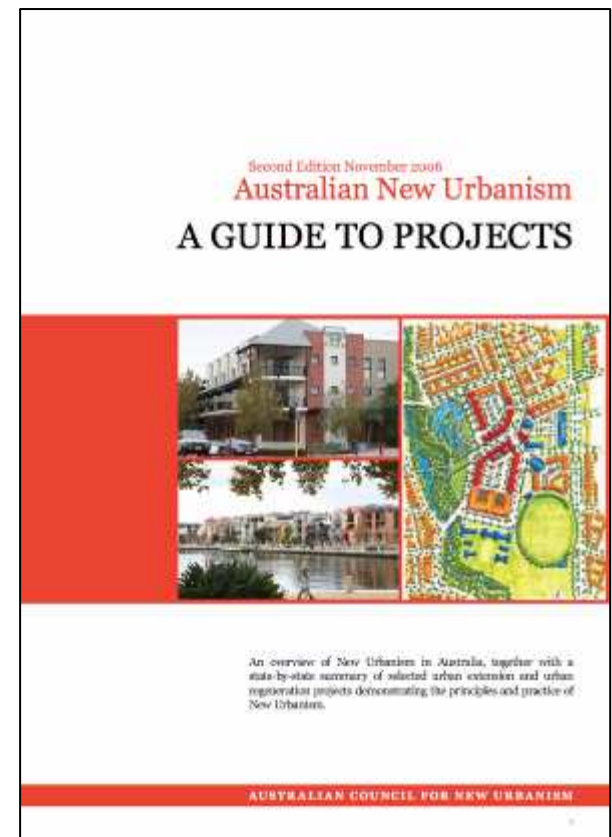
2003: Centre for Transit-Oriented Development and Reconnecting America set up, and Shelley Poticha takes the helm.

2005: The Second Australian New Urbanism Congress in Sydney, and publication of the first edition of 'Australian New Urbanism - A Guide To Projects'.

2006: Hurricane Katrina devastates Louisiana and Mississippi, Duany leads 11 simultaneous charrettes with massive voluntary team, to re-plan Mississippi Coast (see Victor Dover's Presentation)

2006: WA Projects Bus Tour, and publication of the second edition of 'Australian New Urbanism - A Guide To Projects'.

2008....Third Australian Congress for New Urbanism Congress in Brisbane, Australian Council for New Urbanism incorporated. Proceeds to fund uploading NU Projects book to www.acnu.org.



A city's purpose is to maximise exchange with minimum effort.

...David Engwicht

Mixing Uses



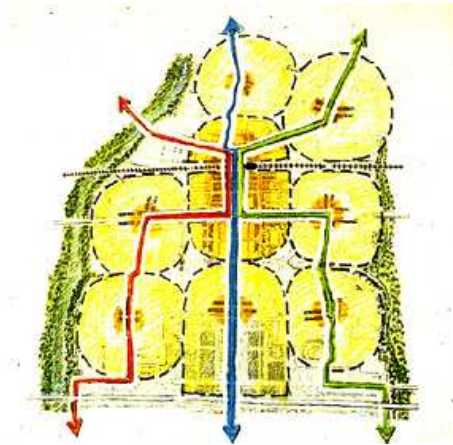


**Segregated
Uses**

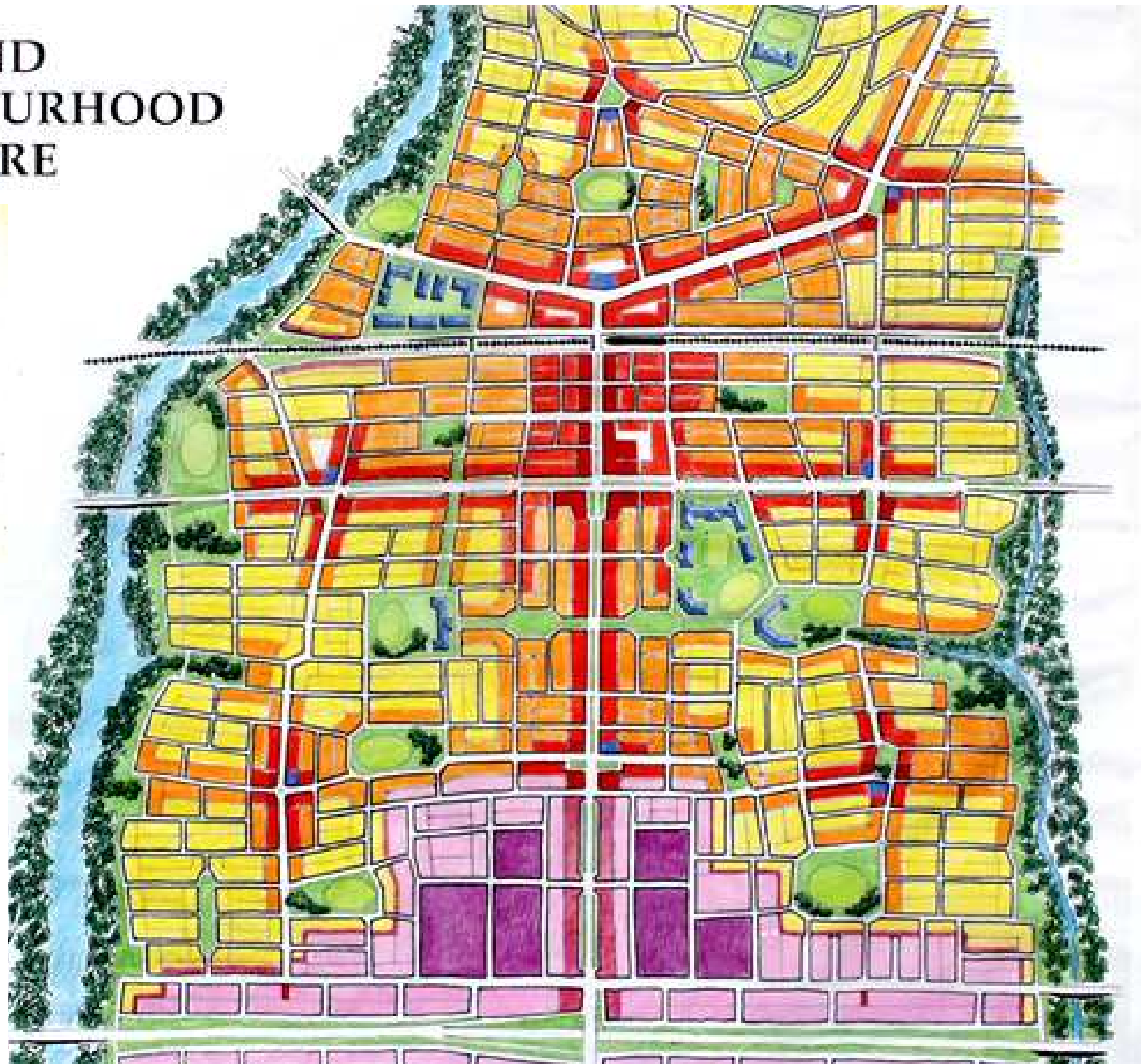


Mixed Uses

TOWN AND NEIGHBOURHOOD STRUCTURE

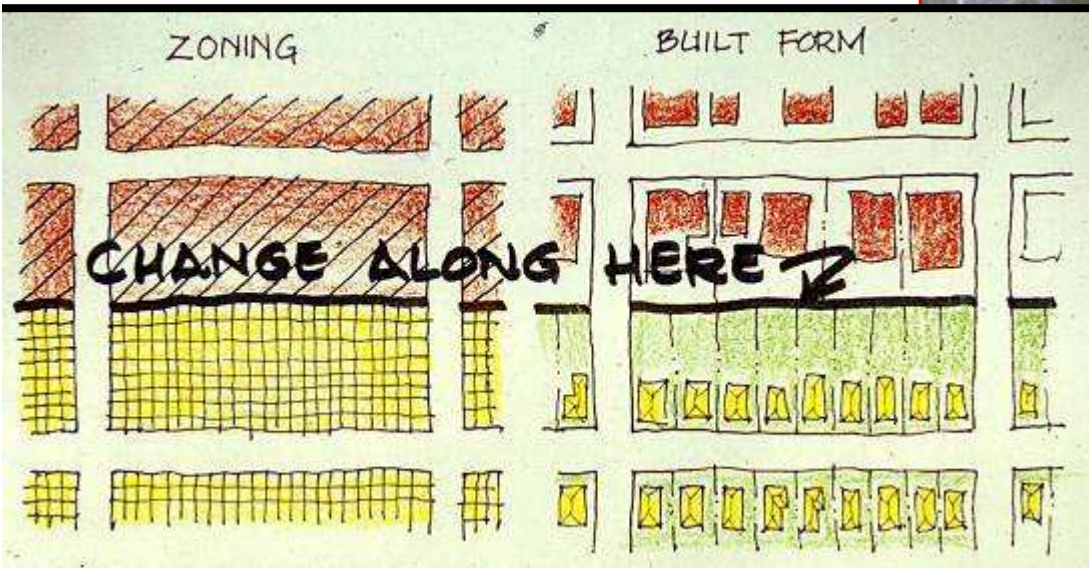


- Optimised Movement Network**
- Compatibly mixing most land uses in close proximity**
- Protecting heritage & environmental assets**
- Providing for parklands**
- Solar lot orientation**





Mixed Use with Compatible Use Transitions



Residential



Ecologically Sustainable Design Pty Ltd, Melbourne

Lower density residential and its relationship to the street



THE NATION

rk

More than a third of us going it alone

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MICHELLE GUNN
Social affairs writer

People without partners

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employees were trade union
members, down from 40 per
cent in 1992.
IN 1998, 52 per cent of mar-
riages were between people of
different birthplace groups (up
from 39 per cent in 1974).
A MARKED shift in long-
term unemployment from
young people to those aged 35
and older. In 1989, 33 per cent
of long term unemployed were
under 25. Ten years later, that
figure had fallen to 25 per cent.
At the same time the





Active frontages
to parks and
streets...where are
the garages?

Fairview Village, Portland Oregon

Tullimbar Village, NSW



Markham, Toronto, Ontario



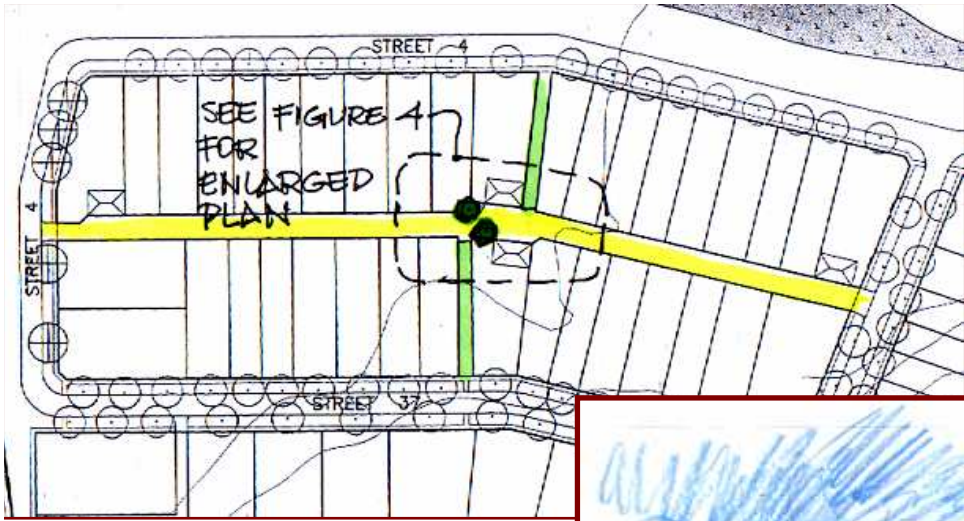


Studio Units on rear lanes

Seaside, Coolum, Qld

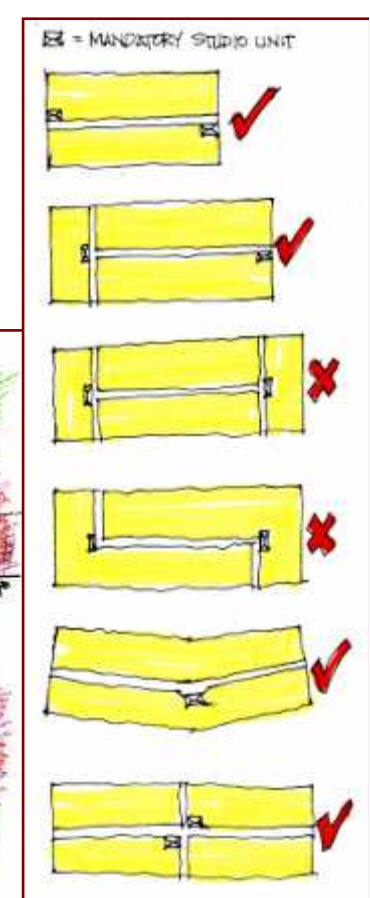


Tullimbar Village (partial plan), ESD urban designers



Tullimbar's Rear Lanes

Affordability, density, and CPTED safety



Open Space inspires Density



Density inspires Open Space

Employment

“No urban area will prosper unless it attracts those who can choose to live wherever they wish.”

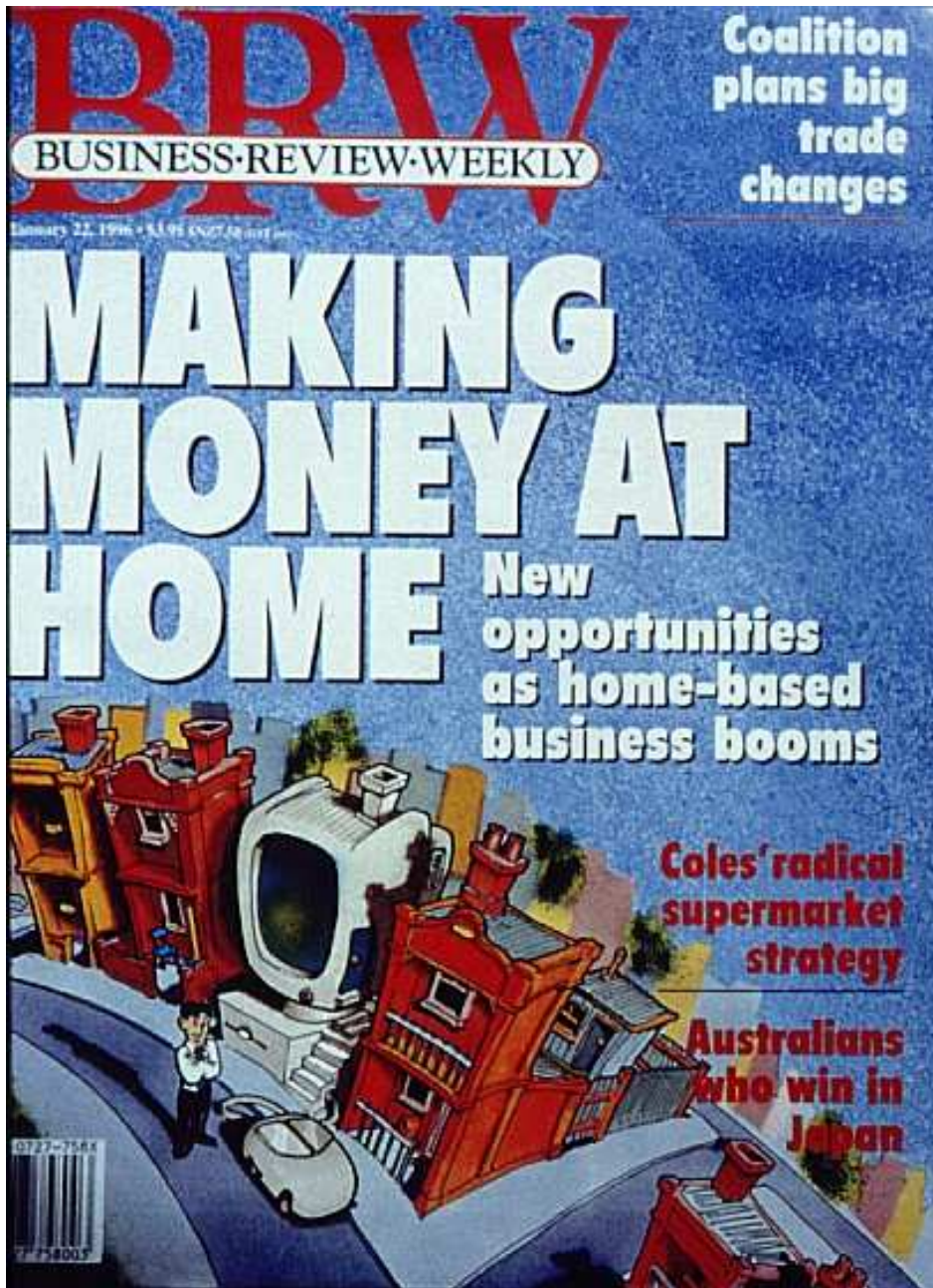
Johnathon Barnett

“Unless our ambition is to be a low-wage developing nation, high urban amenity is a basic.”

Australian Urban Futures Research Program



More people working from home



EMPLOYMENT AND URBAN FORM

76%

OF WORK ACTIVITIES
ARE NOW COMPATIBLE
WITH RESIDENTIAL

Derek Kemp, 1995

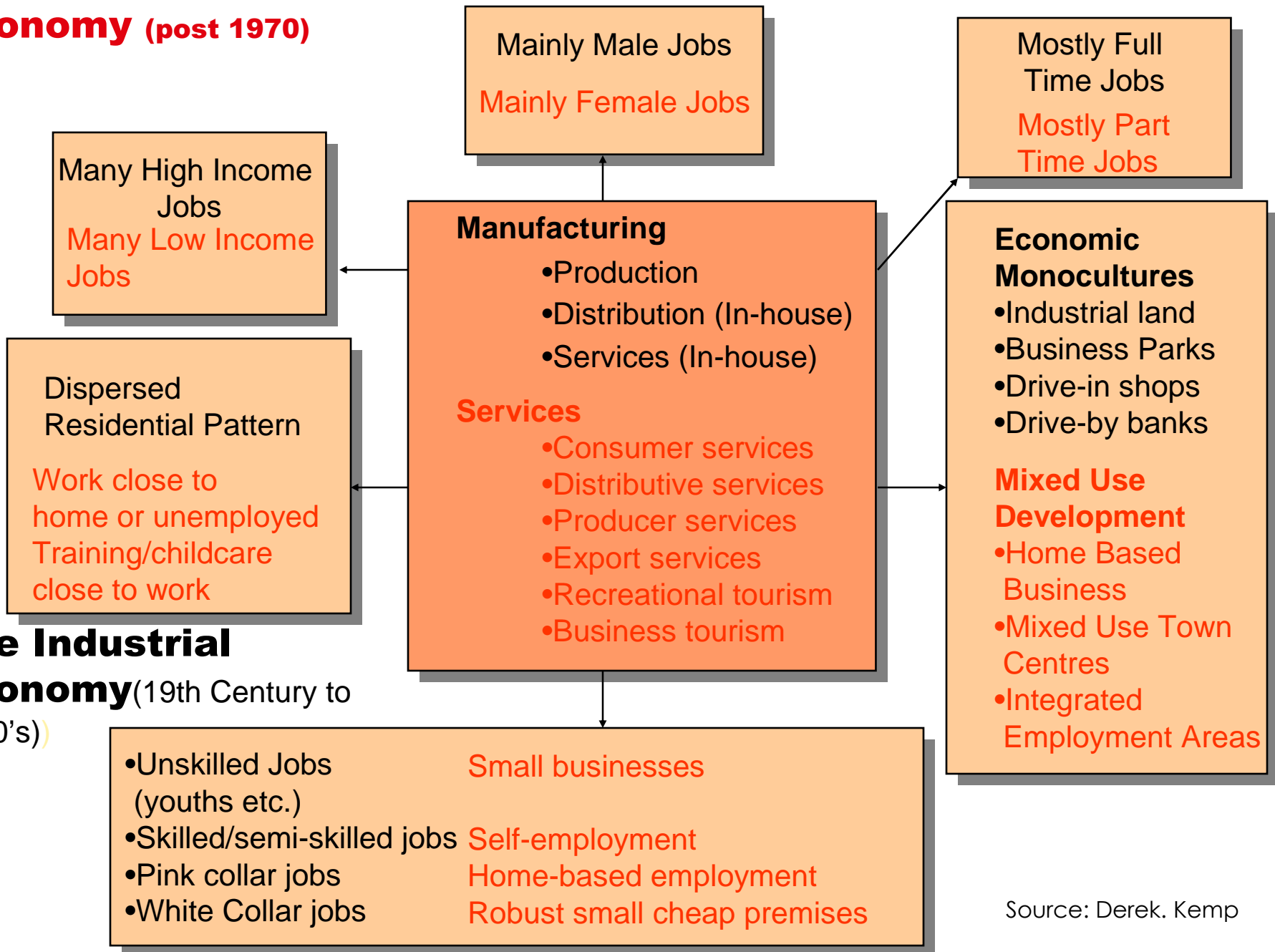
Cost Efficiencies, no commute

Need for compatibility with household

Cabin Fever

Support Services

The Post-industrial Economy (post 1970)



Source: Derek. Kemp

Urban Centres



Ecologically Sustainable Design Pty Ltd, Melbourne

Retail Trends

Average length of visits to US enclosed shopping malls declined from 49 minutes in 1987 to 29 minutes in 1995.

Therefore, conventional approach of high specialty retail rents cross-subsidising low supermarket/DDS is under stress.

Enclosed shopping centres need to remodel every 7 years on average, and to expand their catchments to fund these improvements.

...Mike Cullen, Patrick Partners, Sydney



SPECIAL FEATURE WHERE EXECUTIVES RECHARGE THEIR BATTERIES

BREW

BUSINESS REVIEW WEEKLY

Mortimer's vision to cut red tape

August 4, 1997 • \$3.95 (NZ\$7.50 GST Inc)

PROPERTY SHOCK

Shopping centres overvalued by 35% – retail association chief

Lessons from retailers who can stand the heat

A shopping cart is shown on a background of intense fire and flames. The cart is empty and appears to be floating or moving through the fire. The fire is bright orange and yellow, with dark smoke rising from it. The overall scene conveys a sense of heat and pressure.

Town Centre Form, walkability and community



Car-orientated shopping centre



Pedestrian-based town centre
5 times as many non-retail jobs

(Mike Cullen, Patrick Partners, Sydney)



Just like humans, every building has a “face” and a “butt”. Building “faces” are the good things like interesting shop windows. Building “butts” are the loading docs, blank walls, and large boring car parks. ‘Courteous’ buildings put their faces to the public realm, not their butts.

$$\frac{\text{Continuous active frontages}}{\text{blank walls + parking + truck docks}} = \text{butt coefficient}$$

The dashed yellow and red lines on the photos below show ‘building butts’, facing out on the left, and courteously facing into rear lanes on the right. Both types of centres can have large supermarkets, department stores, and so forth.



**Enclosed private shopping centre -
very high butt co-efficient**



**Mixed-Use public town centre -
very low butt co-efficient**

The Point Cook Town Centre Indicative Concept Plan by ESD



Multi-storey, main street-based centre concept of around 25,000 sqm retail, and 15,000 commercial, with community facilities, live-works and housing. Boardwalk Boulevard and Dunnings Rd designed as Integrator Arterials.

Walker Corp constructing Point Cook Town Centre as joint venture partner with VicUrban

in response to ESD Indicative Plan and Design Brief

Don't miss Walker Corp Presentation at 4:40pm on Day 2



Economic Performance of Mixed-Use Centres

Yaromir Steiner, ICSC head, 2004 keynote address
(abbreviated)



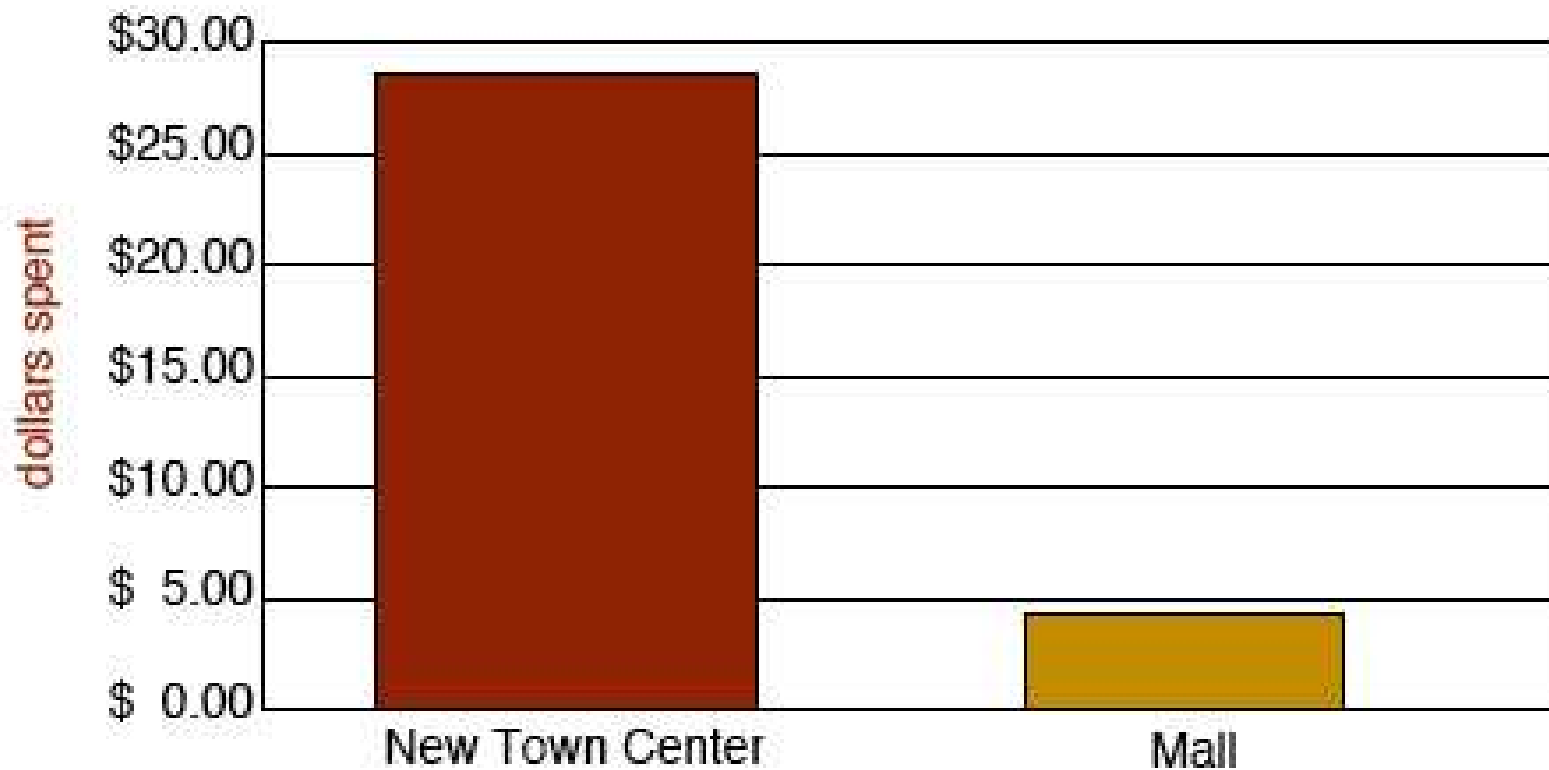
The Future of New Town Centers . . .

Well-merchandised and well-designed public spaces:
Streets, squares and parks will become commercial, social and civic hubs.



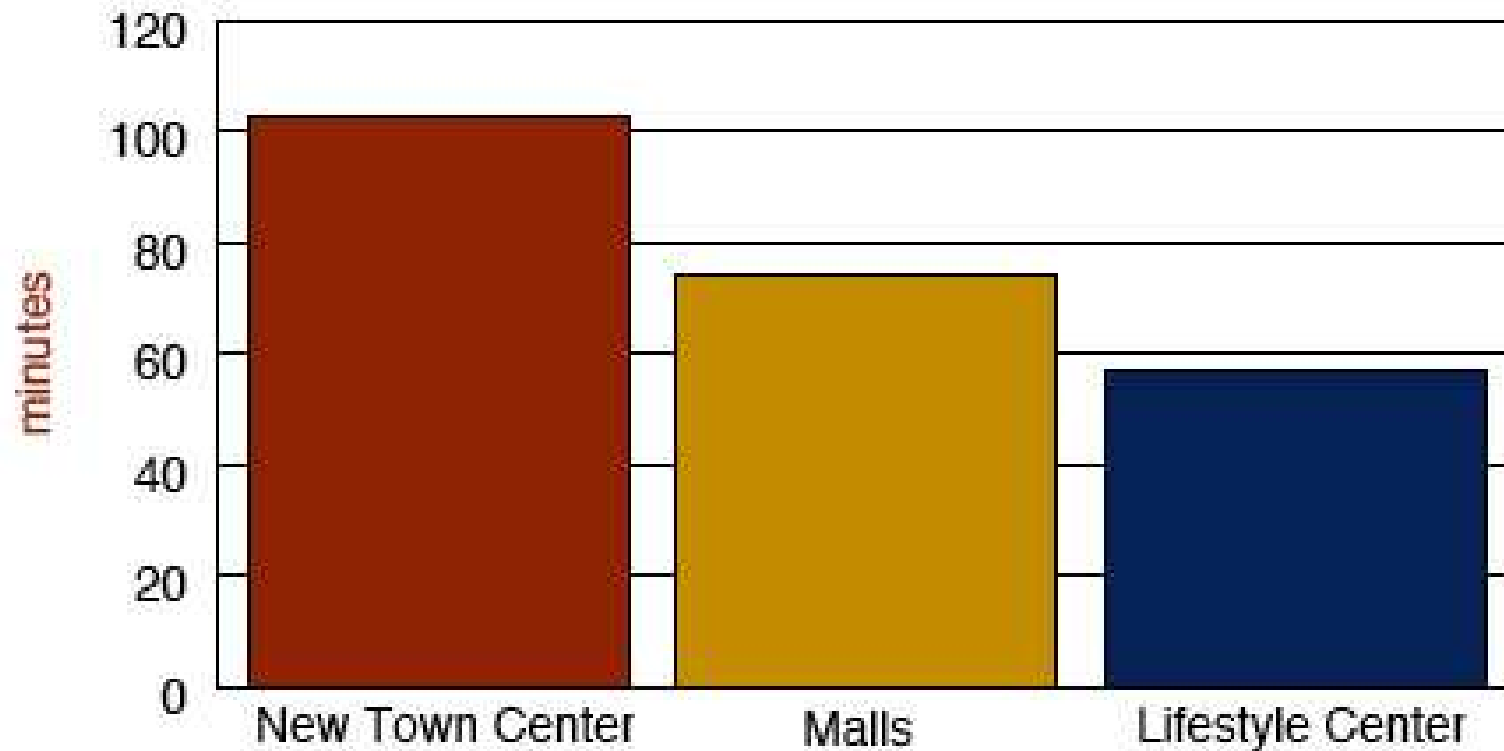
Result:

Food and drink expenditures are 5 times the average mall.



Result:

The average length of stay is 102 minutes compared to a mall average of 76 minutes and a Lifestyle Center average of 57 minutes.

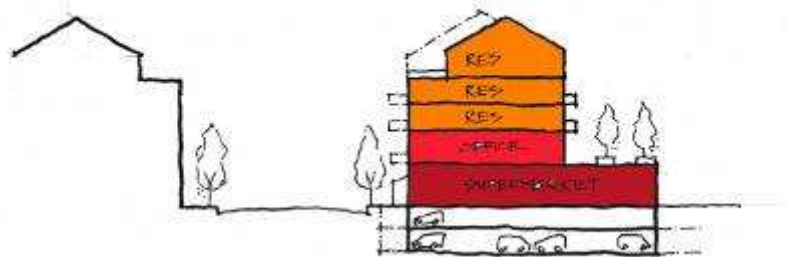
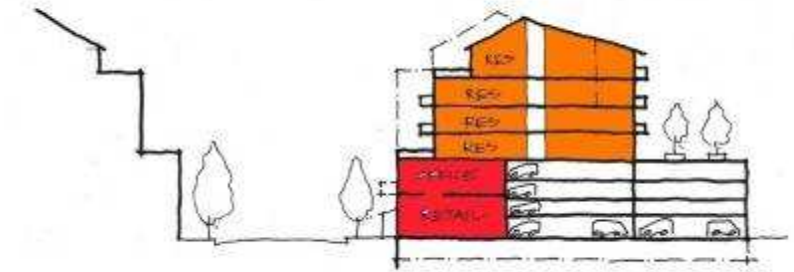
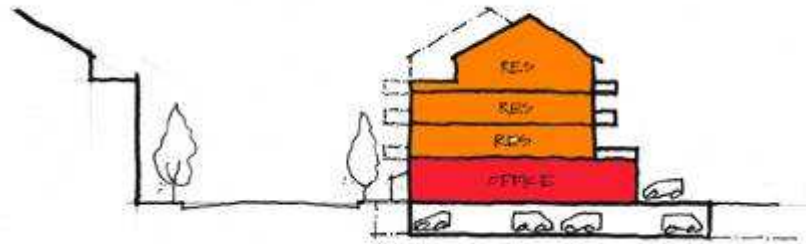
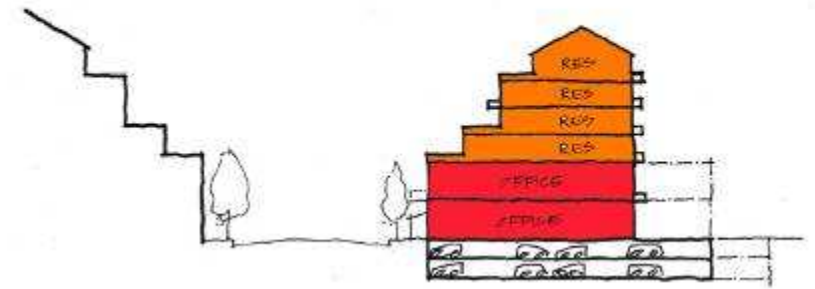




Visit us online:
www.steiner.com



Choices of Parkikng, Mixed-use Building Forms and Characters



Integrating Big Boxes into Mixed-Use CBD Buildings

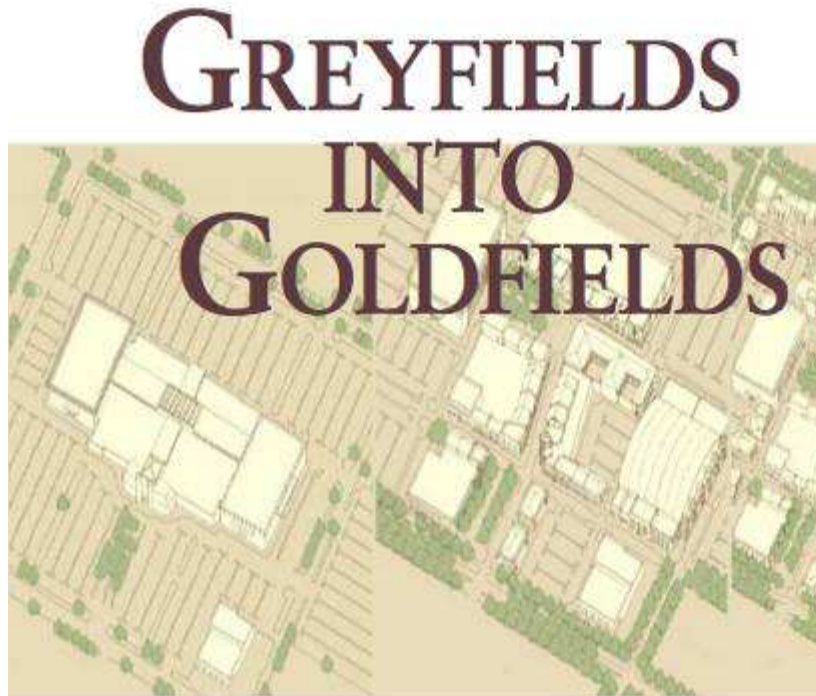


9th and howard affordable apartments
corner view from 9th + howard streets



9th and howard affordable apartments
ground level plan

“19% of all regional malls in the US are dead or dying”



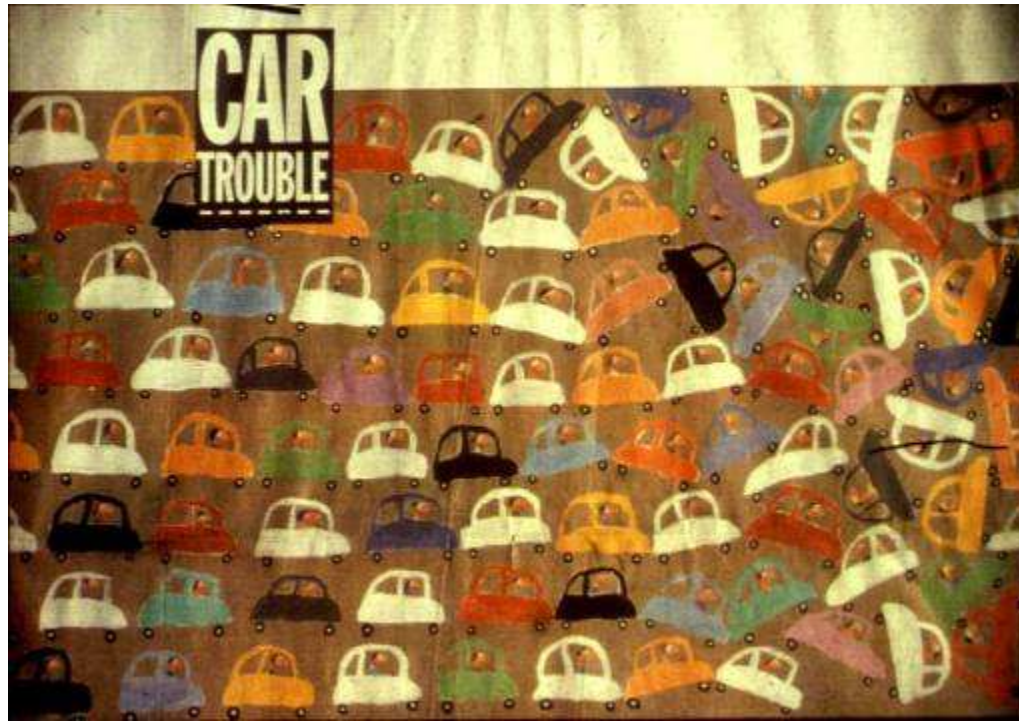
*from failing shopping centers
to great neighborhoods*



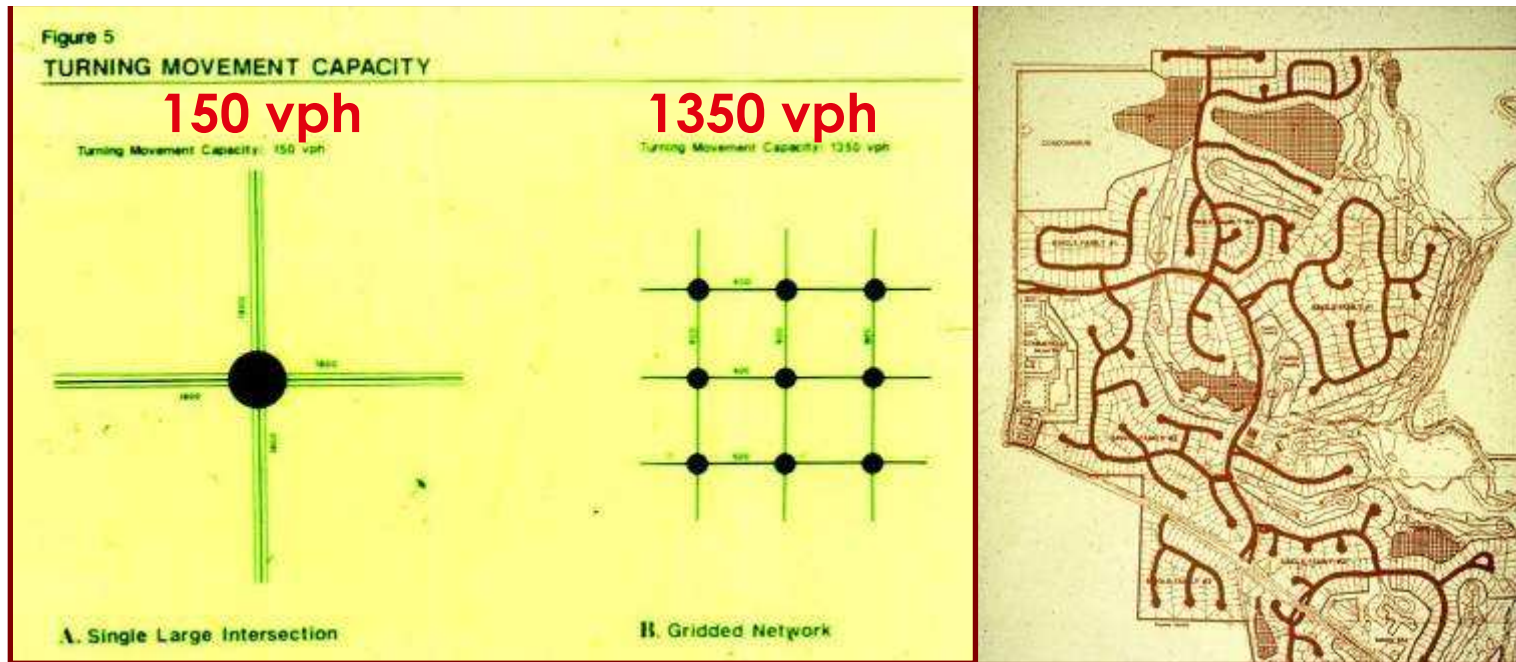
A Study by Congress for New
Urbanism and
PriceWaterhouseCoopers

A report by the Congress for the New
Urbanism in cooperation with the United
States Environmental Protection Agency

Movement Efficiency, Safety, Walkability, and Carbon Emissions



Thank you, Leunig



Congestion, Vehicle Km traveled, and Carbon Emissions



GREENHOUSE NEIGHBOURHOOD PROJECT

Results: Transport energy use emissions

Neighbourhood Type	CO ₂ emissions (tonnes/dwg/annum)	% reduction compared with Conventional
CONVENTIONAL	3.3	-
VICCODE	2.2	33%
TRADITIONAL	1.4	57%

Estimated annual transport related greenhouse emissions per dwelling (tonnes CO₂)

Streetscape, vehicle speed, amenity and detailing



Contrasting forms - Arterial design



Divider arterial

- Isolating
- Poor surveillance
- No business opportunity
- Boring pedestrian environment
- Fast-moving traffic
- Poor quality bus stop locations



Integrator arterial

- Active frontage
- Public transport
- Trees
- Pedestrian-friendly
- Easy to cross
- Good passive surveillance
- Supportive of business

Traffic Calming



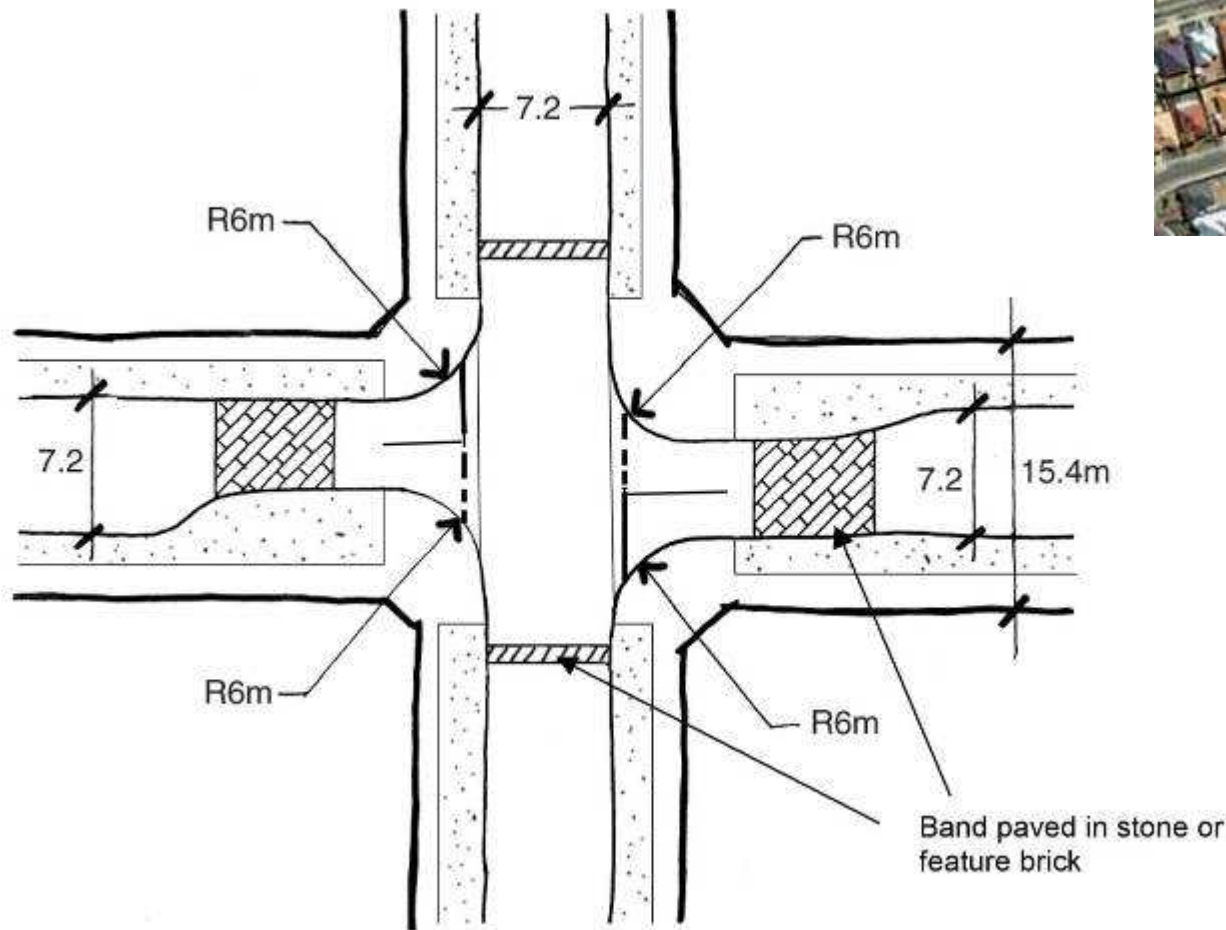
Sketch by Peter Richards,
North Geelong Charrette, 1996

One-lane two-way bridge over creek,
retains trees, avoids cost of bigger
bridge, and slows traffic; yielding
neighbours meet each other



Access Street/Access Street

Basic four-way intersection treatment, without roundabouts or lights required



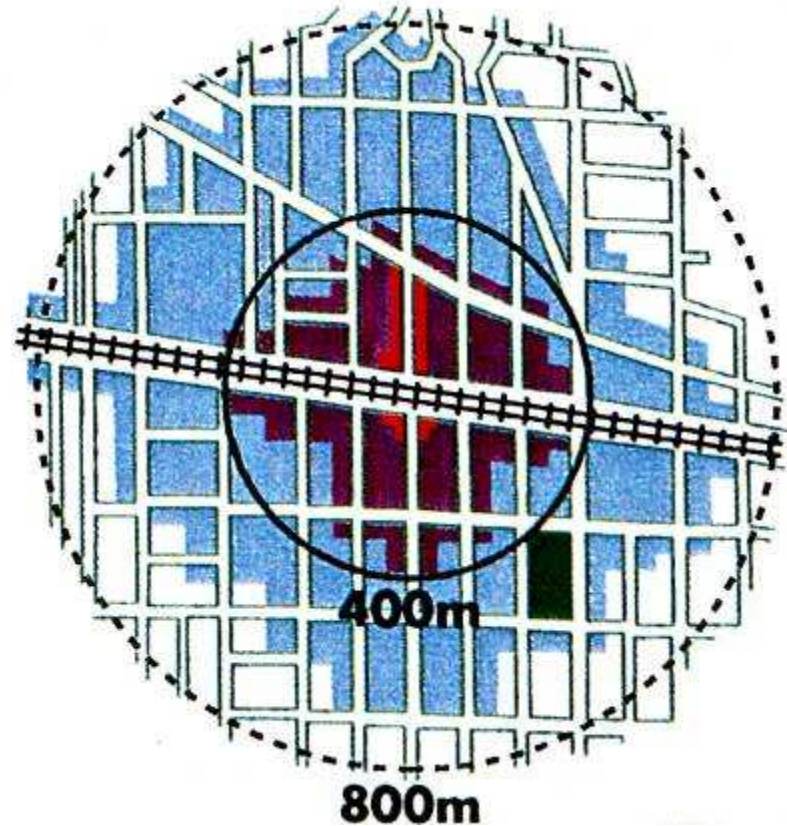
Australian traffic authorities had virtually banned four way local intersections as considered highly dangerous. There is not a culture of four way stops in Oz, so this was a major battle.

Ped-Shed Mapping

Plan A: 38%, 41%



Plan B: 60%, 58%



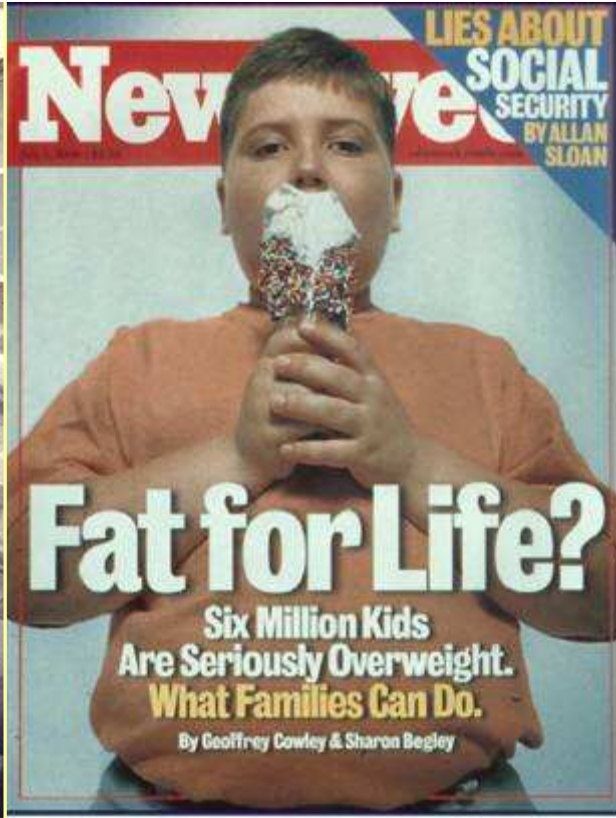
The traditional neighbourhood design of Plan B is more effective and efficient in terms of capturing a larger land area, and a greater number of people within a 400m and 800m walking distance of the destination.

The street networks of New Urbanism designs deliver similar benefits over conventional suburban development.

Urban Fabric, Physical Health and Social Well-being



Ecologically Sustainable Design Pty Ltd, Melbourne



Impacts of car dependence on Elderly, Youth and Caregivers (often mothers)



Obesity Relationships with Community Design, Physical Activity, and Time Spent in Cars

Lawrence D Frank, PhD, Martin A. Anderson, MA, Thomas L. Schmid, PhD
2004 *American Journal of Preventative Medicine*, Published by Elsevier, Inc

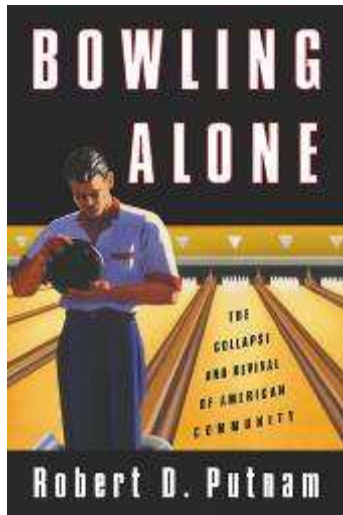
**“Doubling the accessible land use mix
within a 1 km radius of a household
quadrupled the walking activity for that
household.”**

The Public Realm, safety, interest and interaction



'Social Capital'

civic engagement activities include:



- political, civic and religious participation,
- connections in the workplace,
- informal social connections,
- altruism, volunteerism and philanthropy,
- reciprocity, honesty and trust, and
- small groups, social movements and the Net.

“Community connectedness is not just about warm fuzzy tales of civic triumph. In measurable and well-documented ways, social capital makes an enormous difference in our lives...in child welfare and education; healthy and productive neighbourhoods; economic prosperity; health and happiness; and democratic citizenship and government performance. ...Social capital makes us smarter, healthier, safer, richer, and better able to govern a just and stable democracy.” (p. 332).

Schools: Dealing with 3.5ha public schools

White Box Rise Primary School for Wodonga, Vic (about 2ha)

Courtesy Annand Alcock Urban Design, Sydney



Town and Neighbourhood Structuring

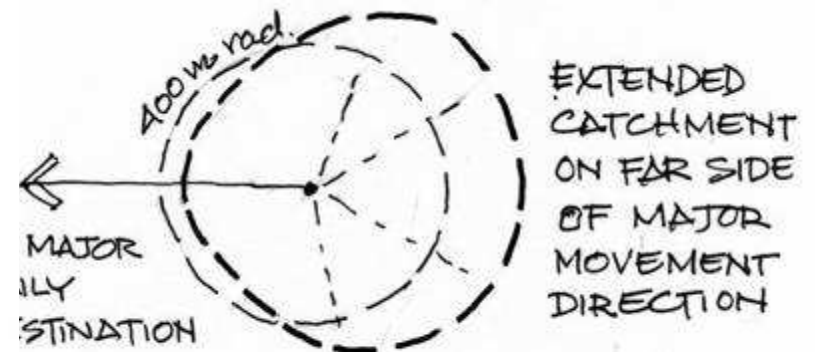
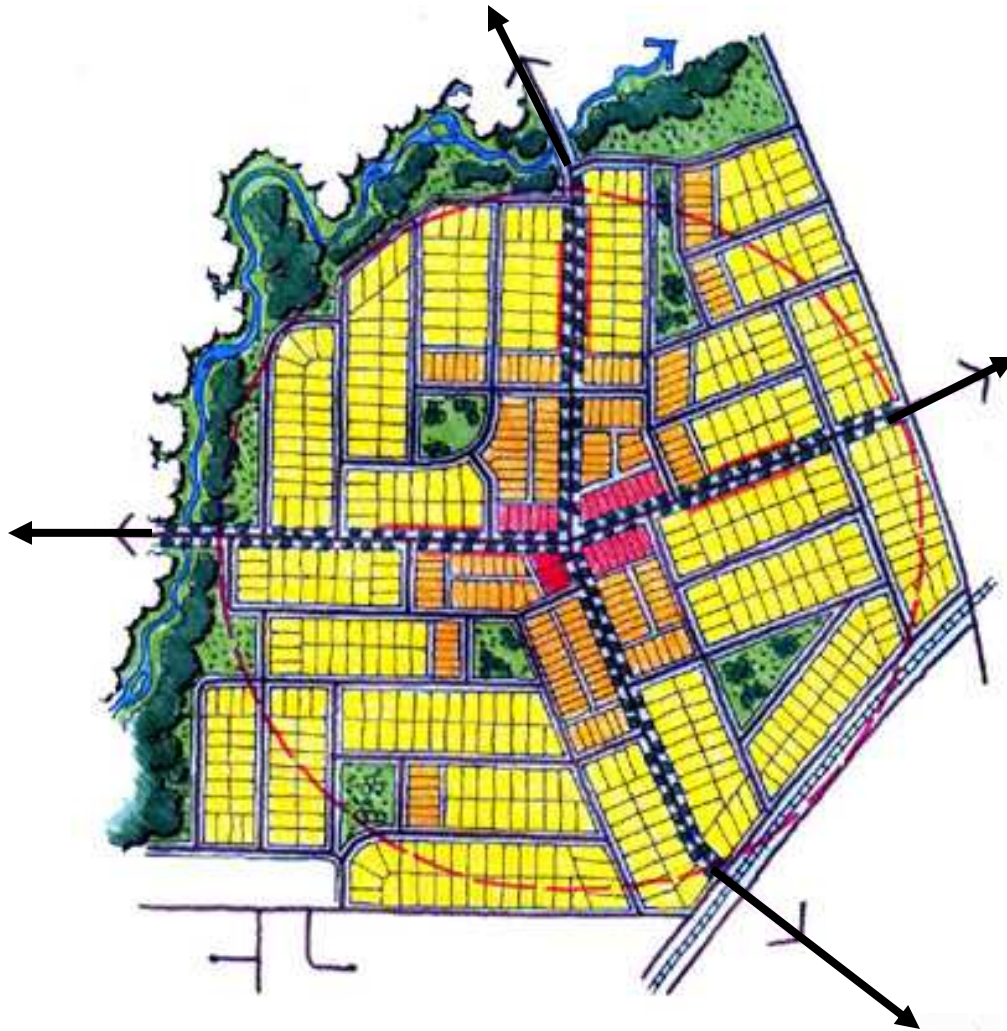
The Basic Element of New Urbanism - A Walkable Neighbourhood

400m walkable radius

Urban Centre Location

1. Centrality
2. Destination
3. Movement Economy

Movement Economy, 'to' and 'through' traffic, bus route, with at least 3000adt, serving 750-1000 dwellings.



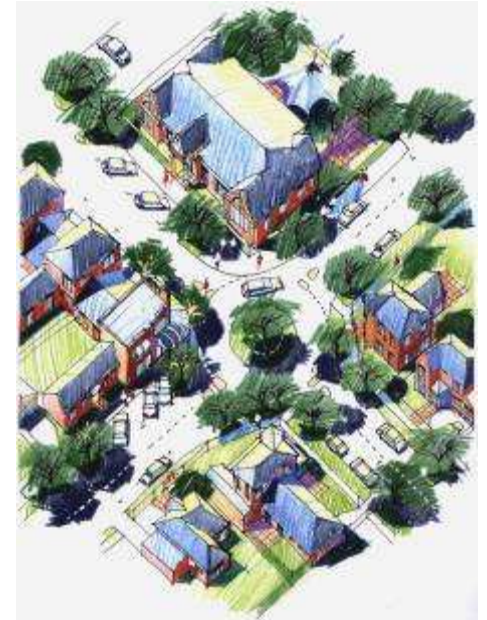
Neighbourhood Centre



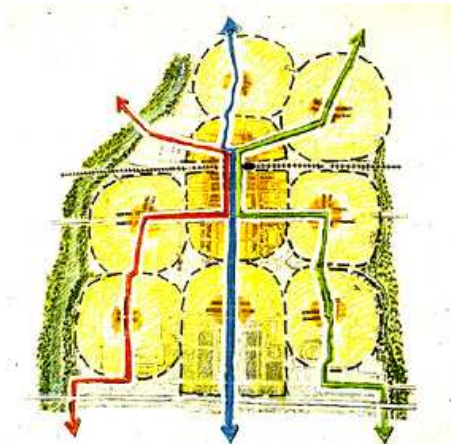
**Strand Neighbourhood
Centre, Point Cook, western
Melbourne
Now constructed**



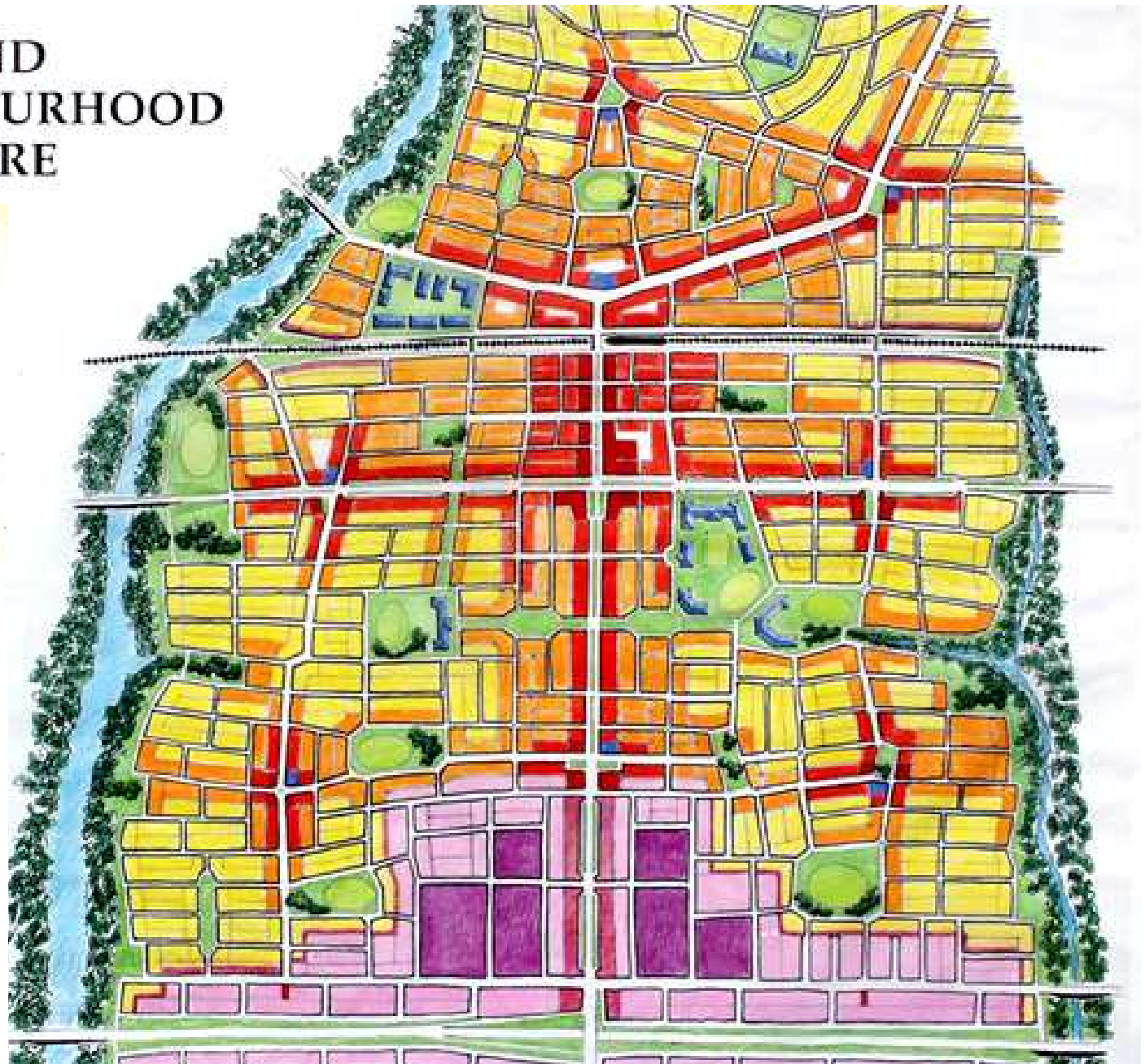
Sketches by Peter Edgeley, Melbourne

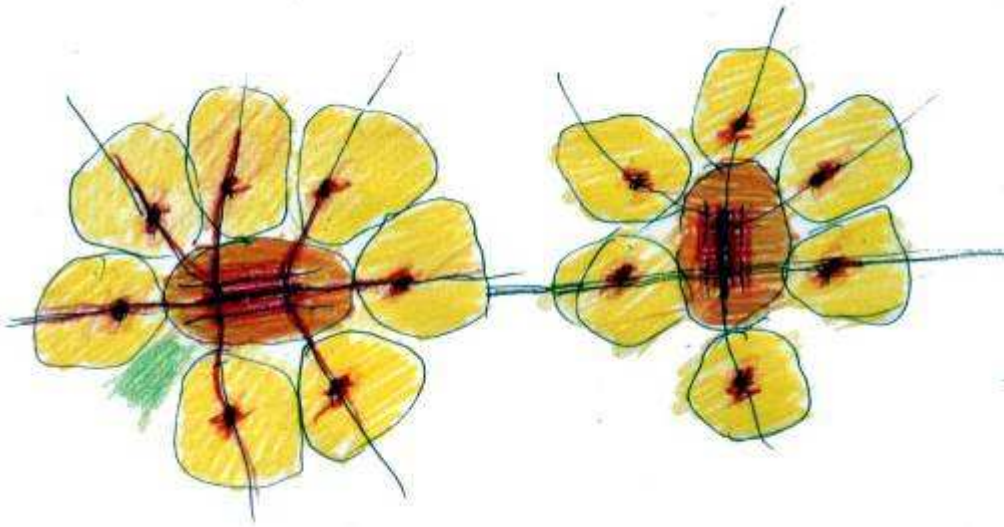


TOWN AND NEIGHBOURHOOD STRUCTURE

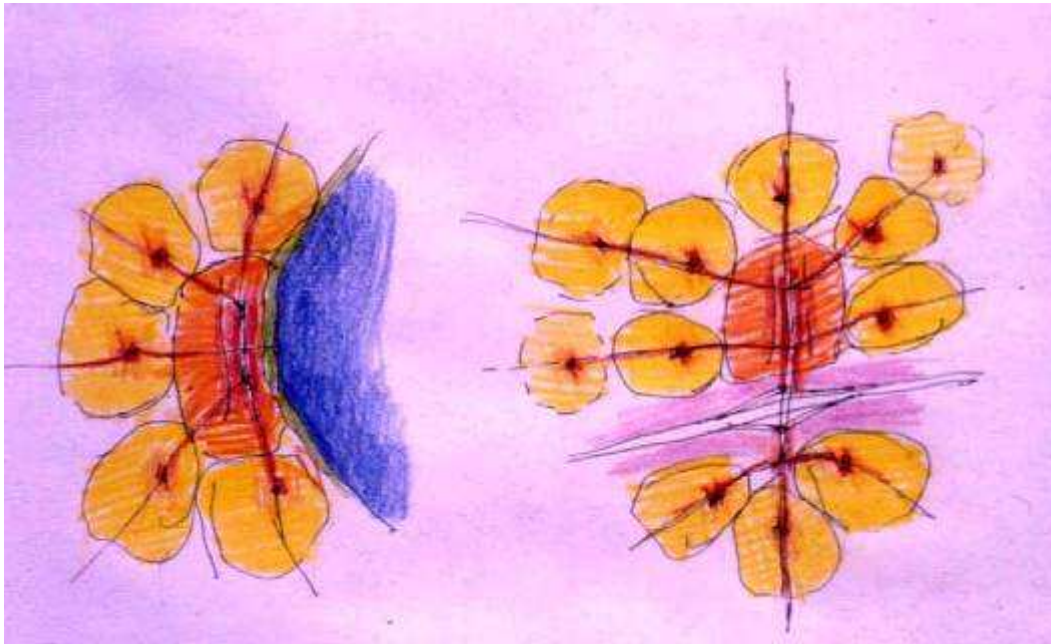
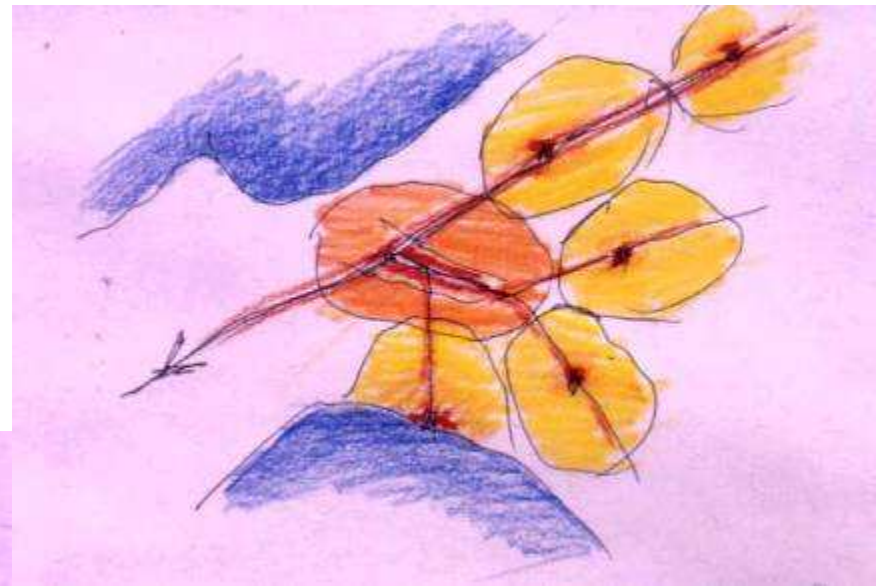


- Optimised Movement Network**
- Compatibly mixing most land uses in close proximity**
- Protecting heritage & environmental assets**
- Providing for parklands**
- Solar lot orientation**





**Adapt to Contexts, and
optimise 'Movement Economy'**



Enquiry by Design Processes

Enquiry by Design Processes

“For every complex and difficult problem there is an easy solution, and it is wrong.”

...H. L. Mencken

A solve-one-problem-at-a-time approach will only paint the the complex inter-dependent whole into a corner.

Interlocking problems usually require interlocking solutions.

Stakeholders are *defacto* clients.

Conventional ‘Public Consultation’ is often self-defeating.

Enquiry by Design

(this term generally covers the suite of processes)

Enquiry by Design is a transparent, stakeholder-collaborative, design-based process for resolving complex and controversial urban projects. Because the factors influencing urban development, sustainability and amenity are so inter-dependent, Enquiry by Design deals at the same time with all environmental, economic and social issues, and at all scales ranging from architecture to the sub-region.

**Simultaneously Interactive
instead of
Sequentially Reactive**

This writing courtesy of ESD

Charrette (5 days usually)

Oriented for public, when project requires very significant citizen participation

Introductory Public Meeting includes Public Consultation, but only after an Introductory Presentation clarifying the whole project context and opportunities





On-site designing and consultation is common across all EBD's



Set up the design studio & Project Briefing

Study & tour the site, Government Agencies Meeting/s



Days 3 - 4 usually Saturday & Sunday



Community and/or Stakeholder Consultation for Charrettes

Topical and/or area-specific meetings

'Open Studio' sessions for the public

Meetings with landowners

Interim Design Review

Day 5

In-house Iterative Design Resolution iterative with Measuring of Outcomes, Preparation of Concluding Public Presentation, common to all EBD approaches



Concluding Meeting

(time afterwards for review, questions, revisions)

When Charrette, it's public. When other EBD's, this meeting may be for invited stakeholders only, depends on consultation needs of the project



Enquiry by Design

**Enabling the Power of
Reason to prevail.**

More on this on Day 3



Ecologically Sustainable Design Pty Ltd, Melbourne

Optimising Urban Structure for Urban Centres, Movement and Public Transport

Perth's Northwest Growth Corridor

Western Sydney Urban Land Release



Ecologically Sustainable Design Pty Ltd, Melbourne

Perth's Northwest Growth Corridor

In 1996, the right policies but the wrong planning...a rigorously-planned and car-dependent 'sprawl' in ever-extending corridors - and an urgent need to change as existing road capacities are now predicted to fail.

The Jindalee Enquiry by Design Workshop opens the way to the Liveable Neighbourhoods Community Design Code, 1997



Perth's Northwest Corridor



Existing Sprawl Design for Jindalee Area

Jindalee Enquiry by Design Workshop, 1996

Regional Scenarios

**Scenario C -
preferred
Rail in the centre of
the urban corridor**



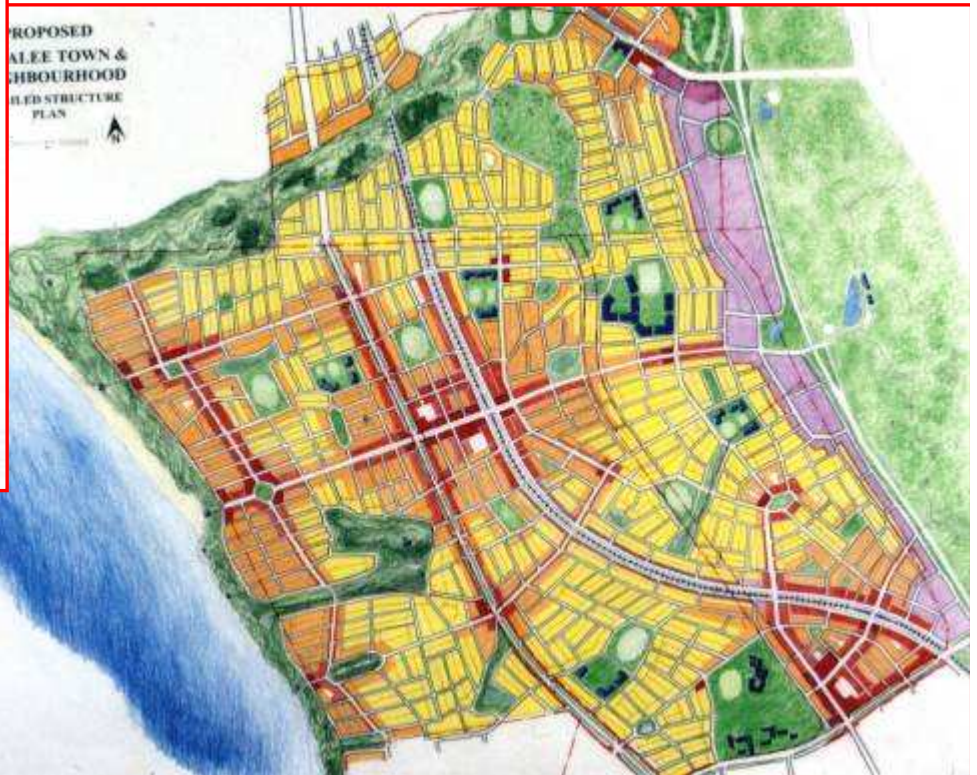
**Scenario A
Rail along
Freeway, on
edge of urban
corridor. National
Park to east.**



**Scenario B
Rail part way
into urban
corridor, along
Connelly Drive**



Jindalee Town and Neighbourhood Structure, and Detailed Indicative Plan...now being implemented for Northern Growth Corridor of Perth, and the basis of WA Liveable Neighbourhoods Community Design Code

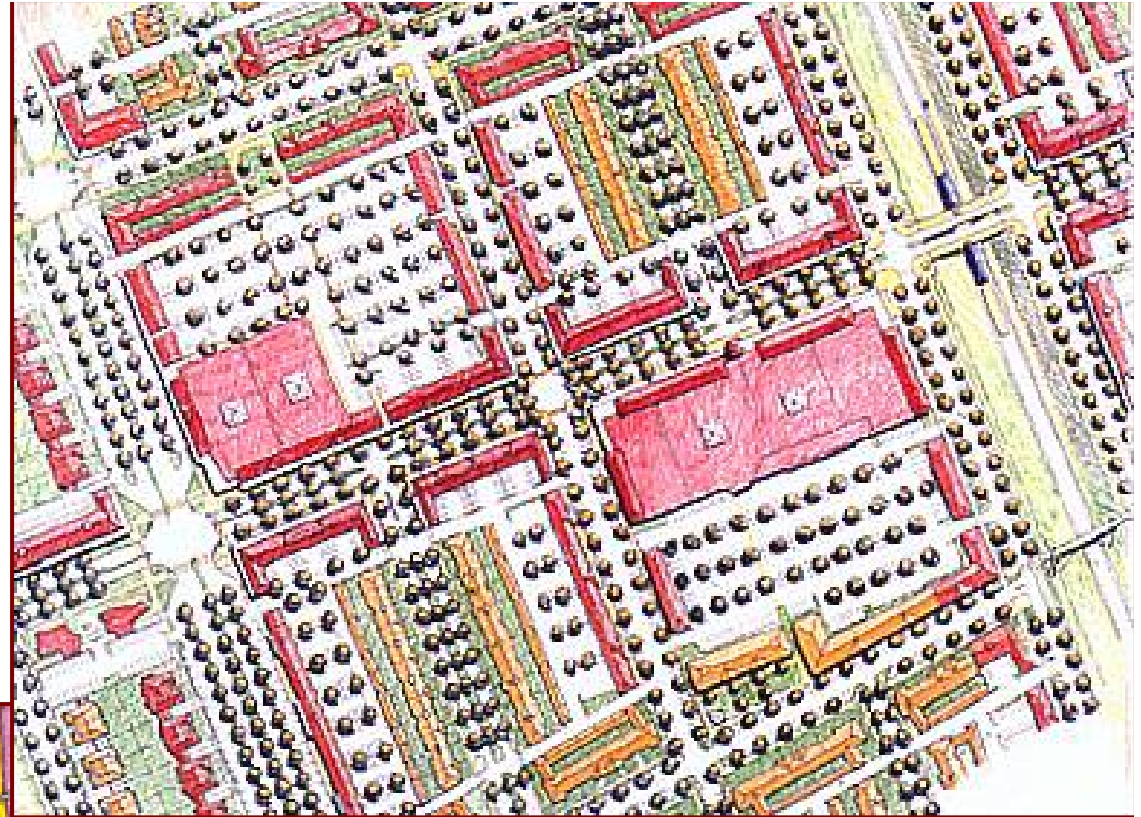


Indicative Design by ESD and Taylor Burrell Barnett

Jindalee's

Main Street-based Mixed-Use Town Centre

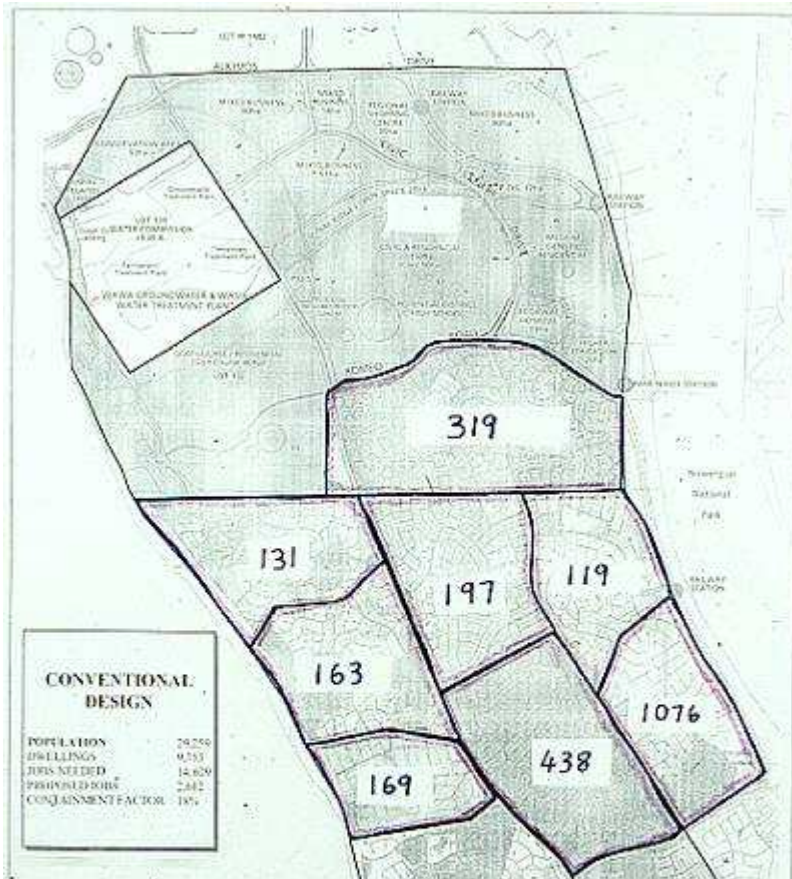
Indicative Designs enabled State Steering Committee to conclude that this design approach would optimise the State's Sustainability Policies.



Indicative Design by ESD and Taylor Burrell Barnett

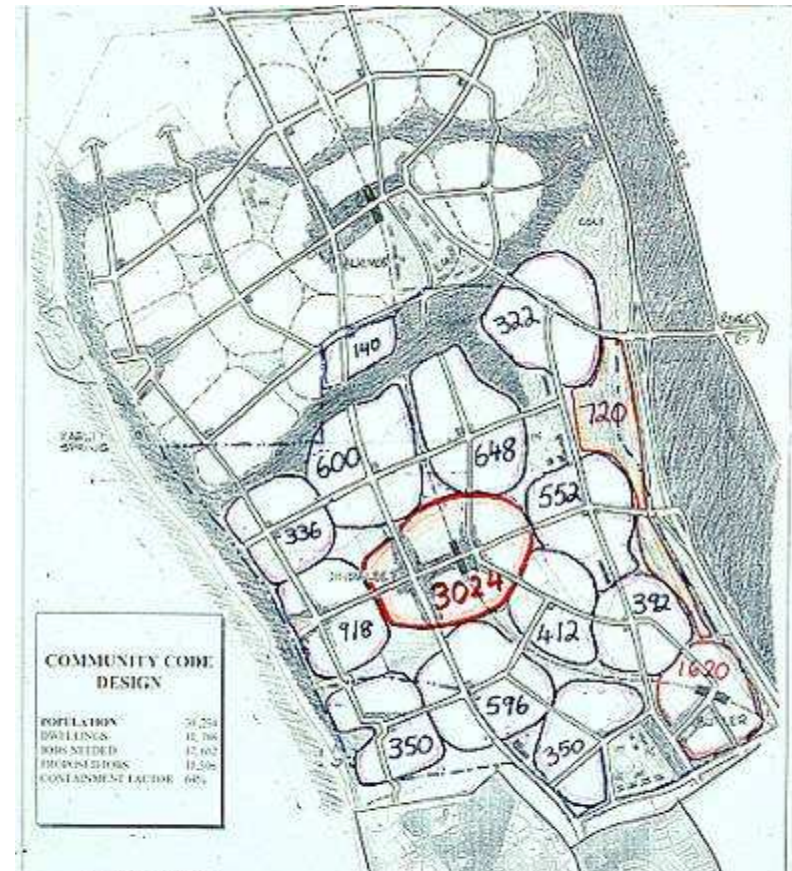


Jindalee - Comparing Employment



Conventional Design

Population	29,259
Dwellings	9,753
Jobs Needed	14,629
Proposed Jobs	2,612
Containment Factor	18%

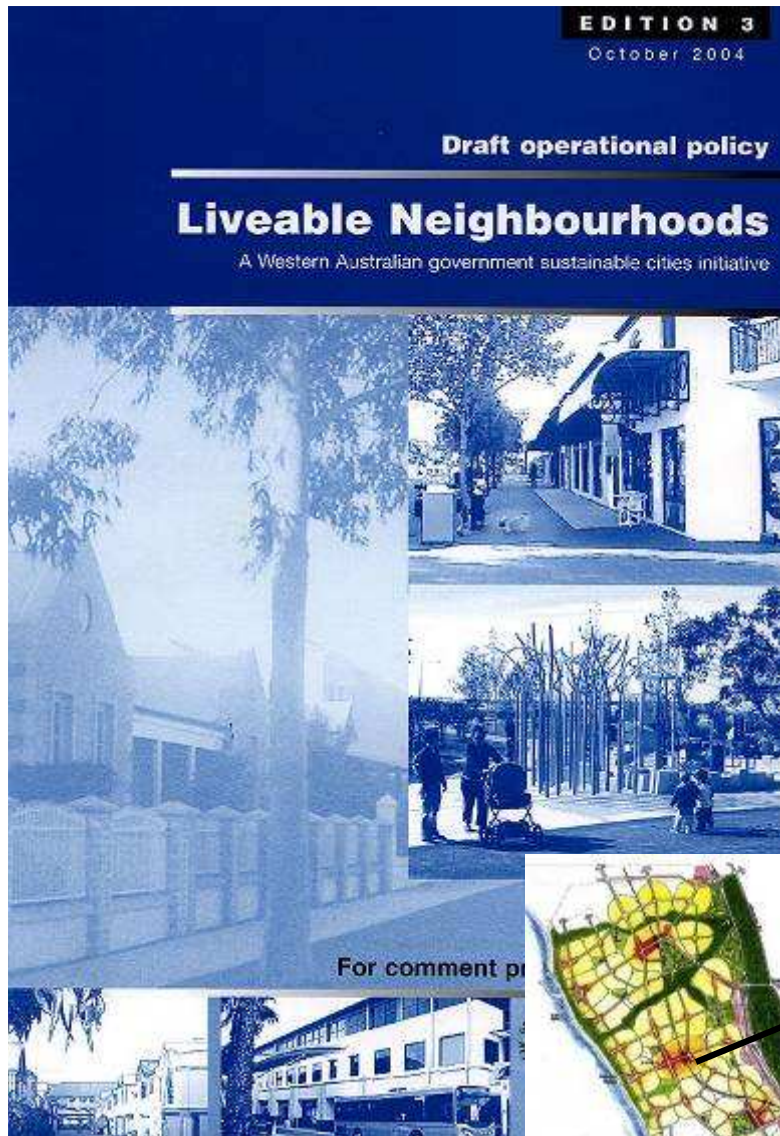


Liveable Neighbourhoods Design

Population	30,234
Dwellings	11,768
Jobs Needed	17,652
Proposed Jobs	11,306
Containment Factor	64%

Liveable Neighbourhoods Code

State-wide Code, WA

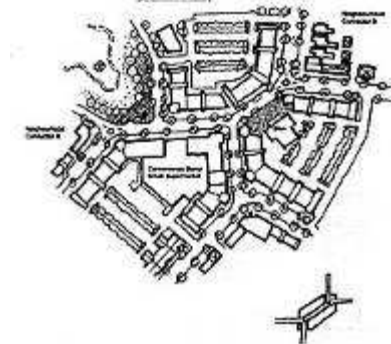


Code Design Elements

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



8.1 Centre focused around a small park or plaza



8.2 Centre on a street segment where two streets come together as one, to focus sufficient traffic movement and activity (adapted from Tullerbah Village, NSW)



8.3 Centre suited to framing views, such as the ocean (adapted from Jiriose preliminary concept)

Figure 8: Typical larger neighbourhood centre layouts



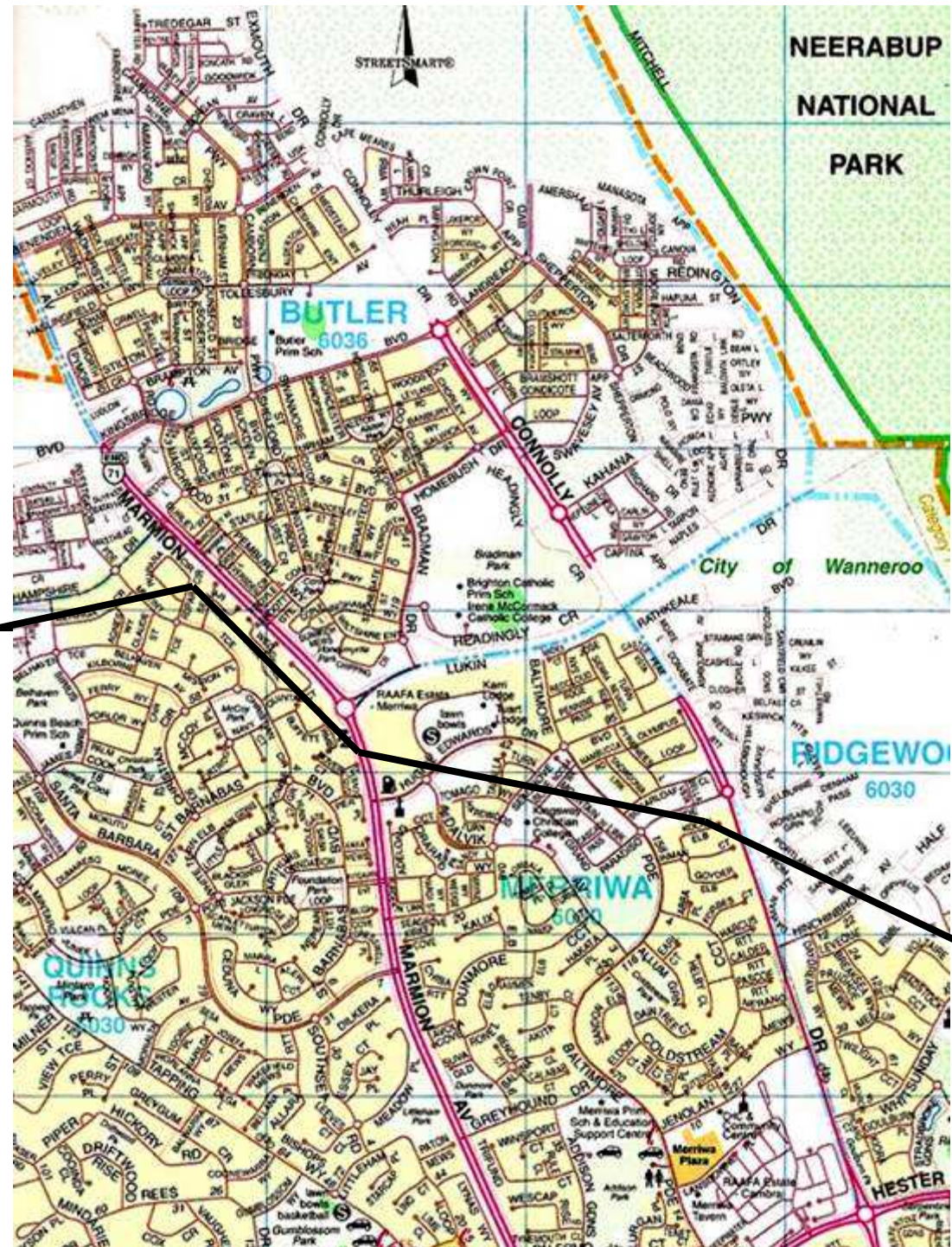
Street Networks

NEW URBANISM

Interconnected street networks, and development fronting arterials

SPRAWL

Curvilinear streets and cul de sacs, long street blocks, poorly-connected for locals. back fences along arterials.



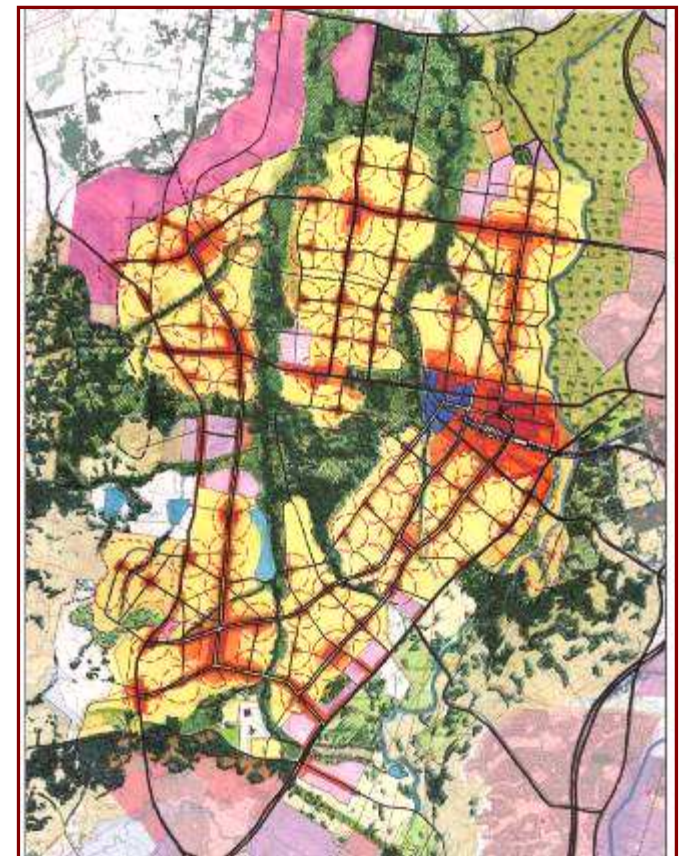
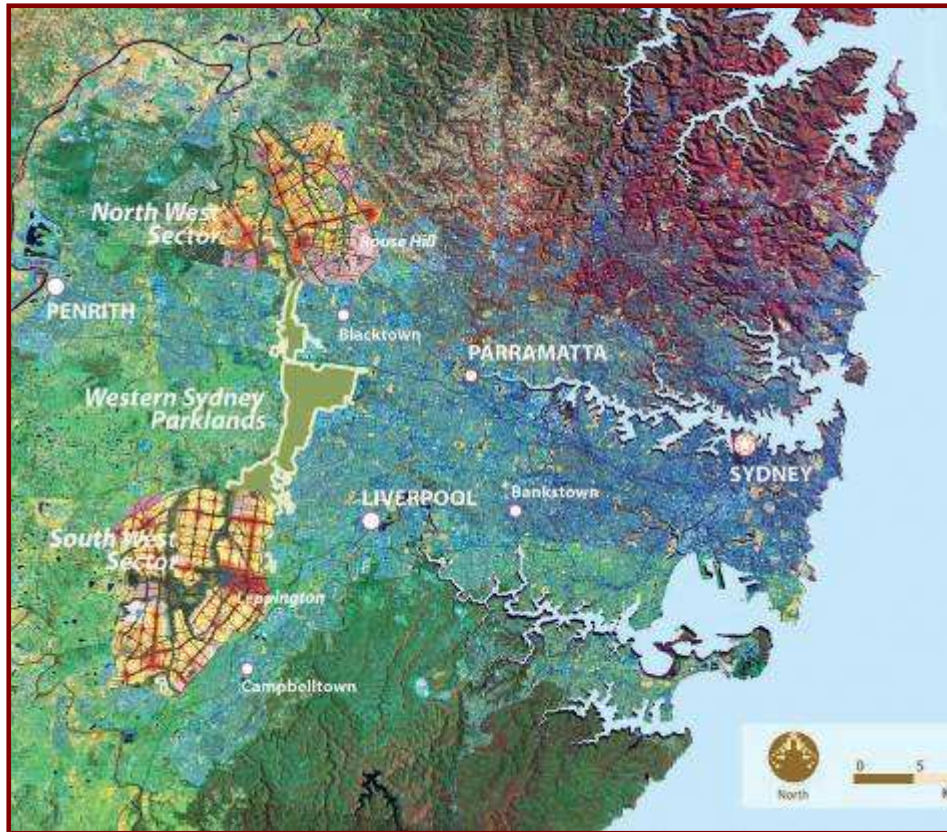
Western Sydney Urban Land Release



Ecologically Sustainable Design Pty Ltd, Melbourne

Western Sydney Urban Land Release

CNU 2005 Charter Award



State Government-led planning for two remaining large areas in Sydney basin.

NSW DIPNR (Evan Jones) leads two

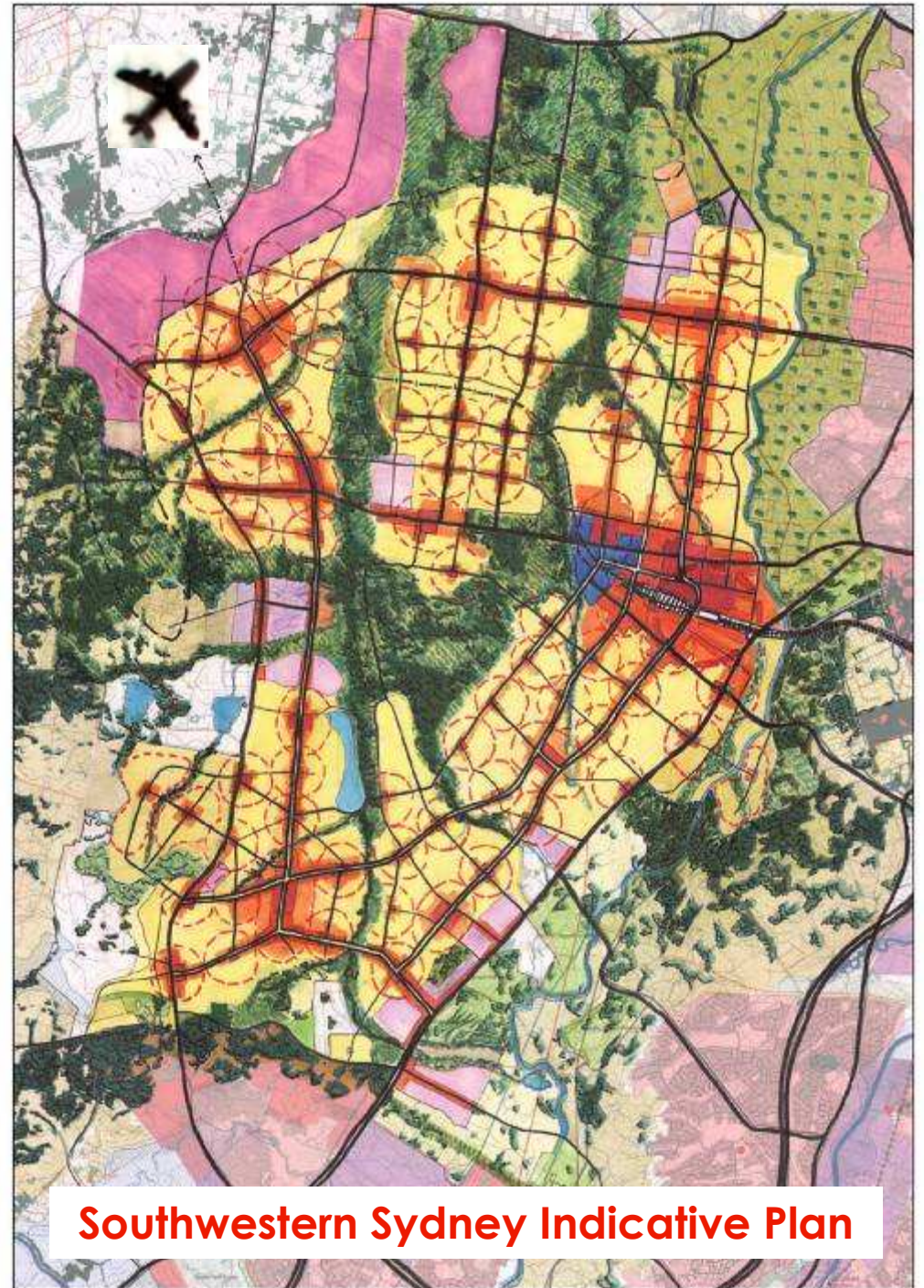
Growth Centres Commission established; \$7B infrastructure funding; mixed-use transit-supportive development must be delivered.

Balance between habitat preservation and efficient urban form.

Township Catchments

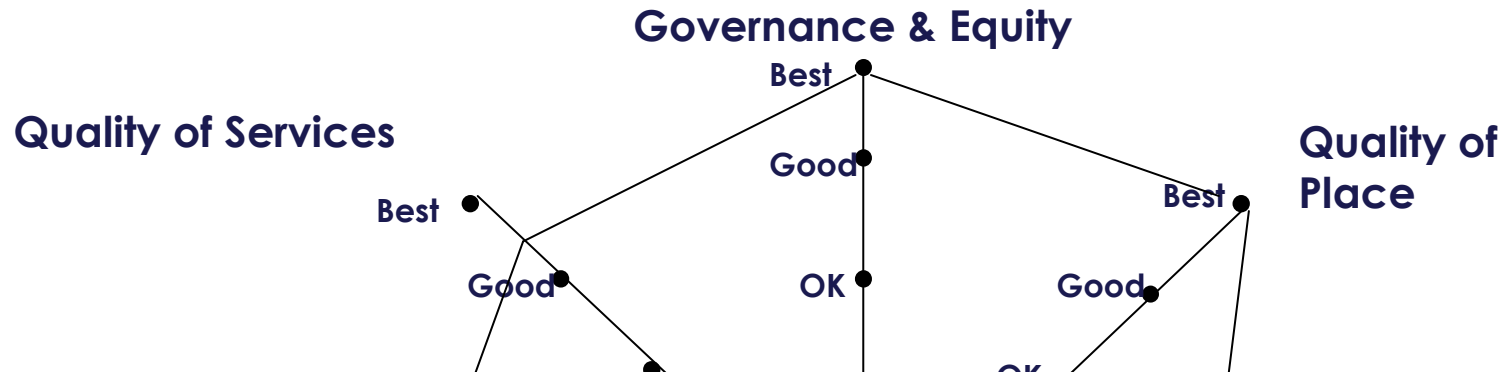
Complementary instead of
Predatory Retail

Movement Network feeds every
centre, including with public
transport, and reduces big
arterials

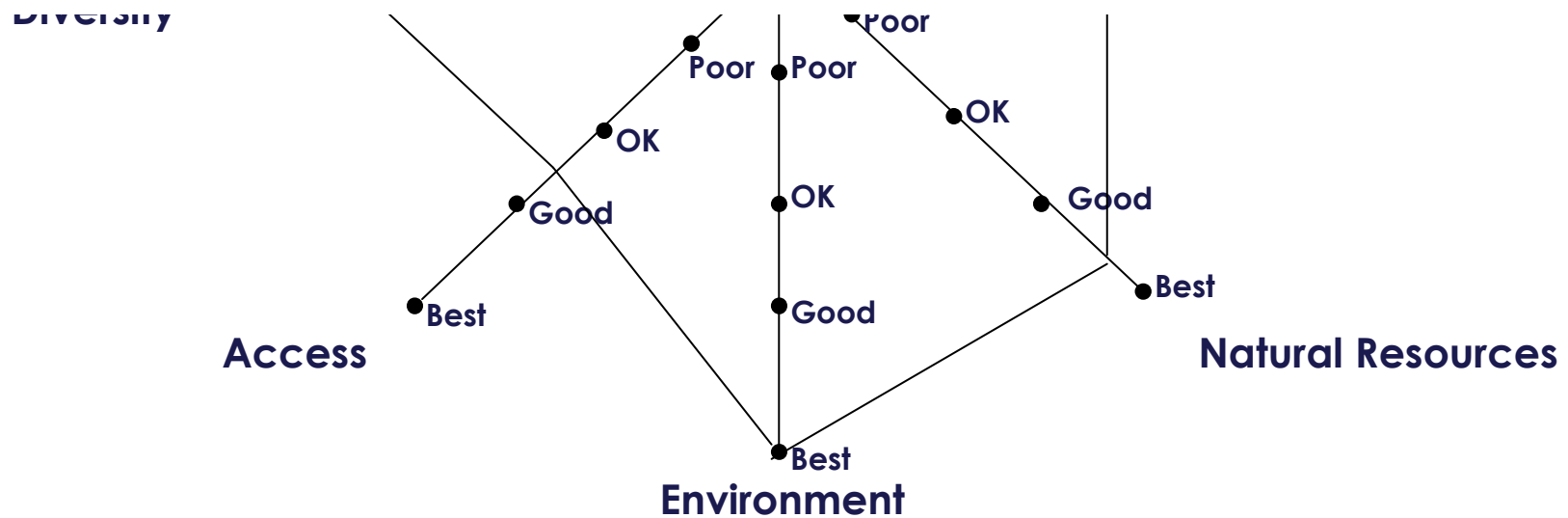


SUSTAINABILITY ASSESSMENT

by Professor Peter Newman, NSW Sustainability Commissioner



Exponential Gains in Global and Local Sustainability

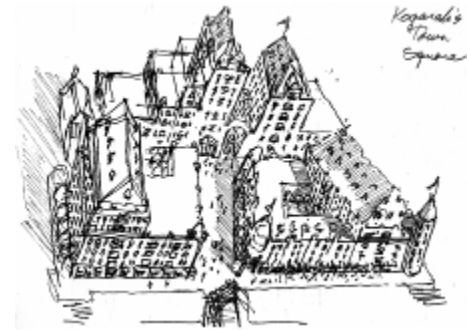


Australian New Urbanism - An Overview of Progress

Urban Centre Regeneration

Kogarah Town Centre, Southern Sydney

Major revitalisation of middle-ring town centre. 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 energy and water efficiency. Born of an EBD.



Midland, WA

1997 Revitalisation Charrette • Enquiry by Design, 2007



Find Kieran Kinsella, Cath Blake-Powell and Brett Wood-Gush for more info.

Australian New Urbanism - An Overview of Progress

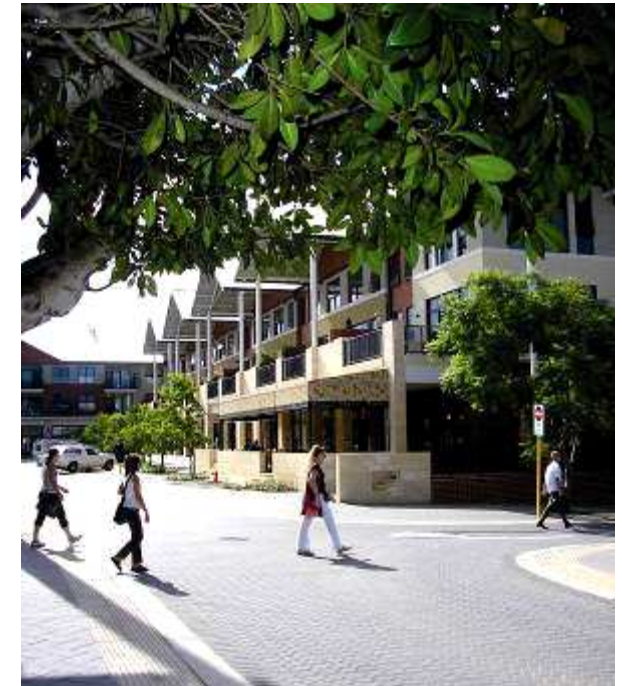
Major Urban Infill Sites

Subi Centro

Subiaco, Perth, WA

More on SubiCentre from Andrew Howe, Day 2, 3:00pm

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.



Australian New Urbanism - An Overview of Progress

Urban Extensions

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 under construction and selling. Quite dense for the urban fringe, with extensive use of rear lanes.

More info from Neville Fredericks, here for Days 1 and 2



Australian New Urbanism - An Overview of Progress

New Mixed Use Street-based Town Centres

Gungahlin Canberra, ACT

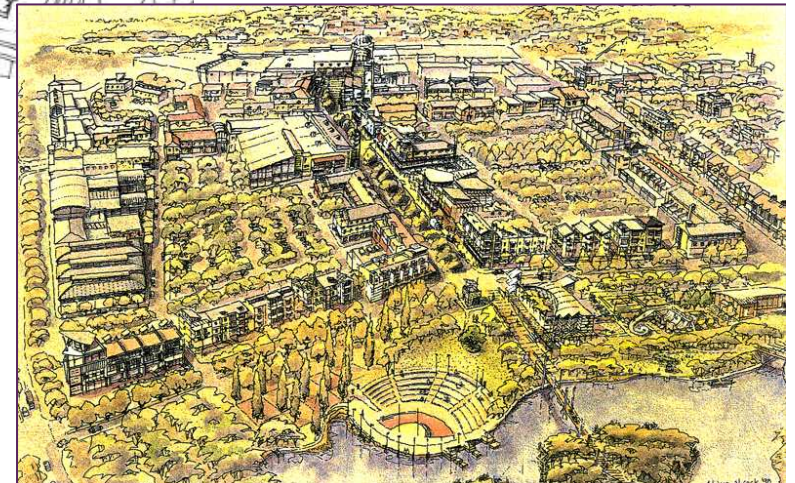
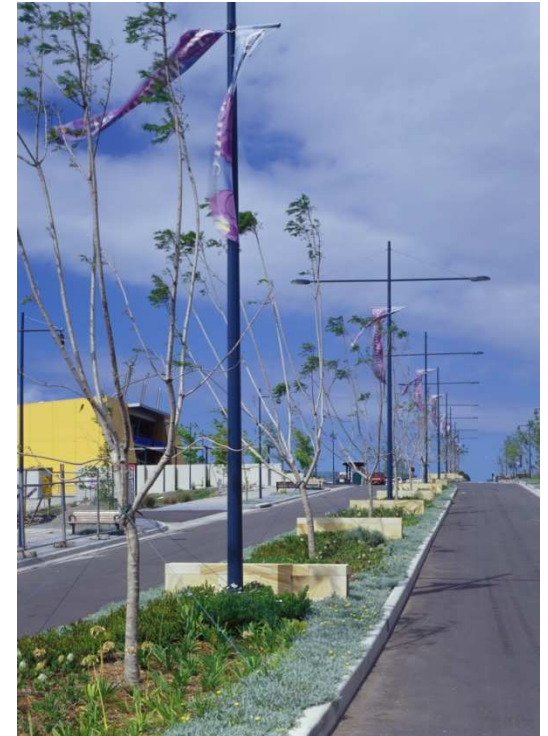
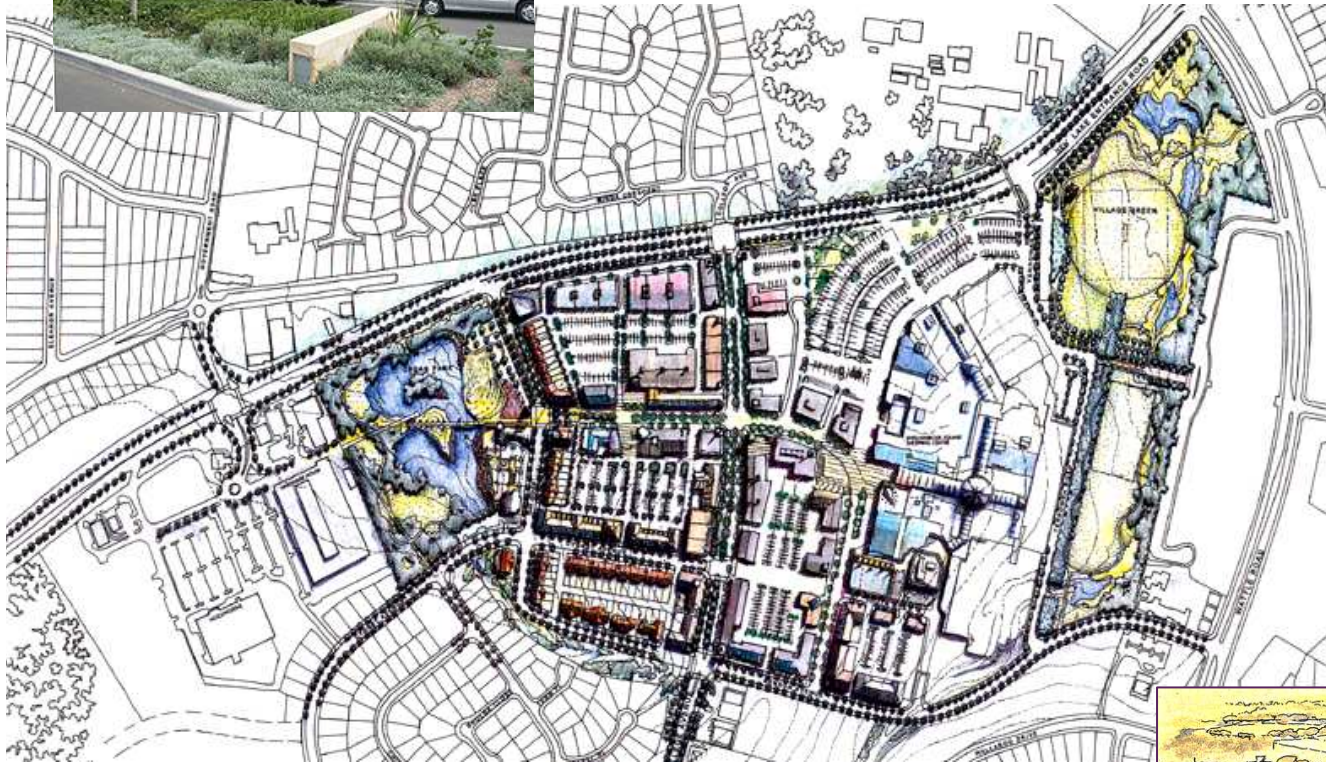


**New street-based town centre,
and new relatively-dense
'inner suburbs'. Led by ACT
Development Authority.**



Shellharbour Town 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 constructed.

Market Performance

Seaside, Florida has appreciated at about 25%, almost annually since commencement in 1983.

“Demand for compact housing near transit likely to more than double by 2025.”

...Hidden in Plain Sight: Capturing the Demand for Housing near Transit, Shelley Poticha, www.reconnectingamerica.org

NU may start slowly, but gets better and better as the place matures; sprawl usually does the opposite.

“So far, New Urban projects weather downturn better. Product diversity, closeness to transit, and the appeal of urban living help offset the biggest housing decline in years.” ...Rob Steuteville

“The fundamentals of the demand side of the housing equation are undergoing radical, once-in-a-century change; family-oriented exurban houses in many markets may never regain their peak values.” ...Tod Zimmerman, New Urban News, Volume 12, Oct/Nov, 2007

Climate Change and Peak Oil = Tipping Point

At least 30% of Global emissions due to transport, about 30% buildings




Melting glaciers will dominate sea-level rise 
Ice melt from smaller sources will be the main contributors to sea-level rise this century, not the larger ice sheets of Antarctica and Greenland
Breaking News - 19 July 2007



Photo courtesy of Jim Kunstler, author of *The Long Emergency*

“Oil at \$150-200USD/barrell by end of this year”

Jim Buckee, just retired President/CEO of \$25-billion Talisman Energy of Canada, as spoken on ABC radio, 29/1/08

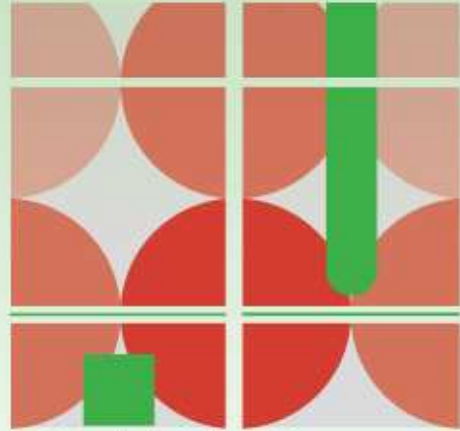
**Carbon is not the sole objective; New Urbanism can and should also deliver
Community Health and Well-Being, Urban Amenity, and Beauty!**

We need a completely integrated global response to all issues, involving all governments and stakeholders; all businesses, industries, researchers and educators; and all aspects of urban design at all scales. All alliances must join now for this historic Tipping Point.

How is Queensland leading this?

And, we're nowhere near being heard yet...how do we spread the word and leverage our momentum? How do we learn to lead better?

ACNU08



Brisbane

**2008 NATIONAL
CONGRESS OF THE
AUSTRALIAN COUNCIL
FOR NEW URBANISM**

6th – 9th February, 2008

